REVIEW AND ANALYSIS OF GRAND COUNTY, COLORADO, LAND USE LAWS RELATED TO WATER QUALITY PROTECTION

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Submitted by

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I. INTRODUCTION AND PURPOSE OF PROJECT.

A. General Background of Study.

The Three Lakes area of Grand County, Colorado, located generally between the towns of Granby and Grand Lake, is an area of rare natural beauty, which attracts thousands of visitors annually. Perhaps the most attractive feature of the area, notwithstanding the clear streams and surrounding mountain peaks, is the three lakes themselves -- Grand Lake, the largest natural lake in Colorado, and Granby Reservoir and Shadow Mountain Reservoir, two high mountain reservoirs constructed and operated by the United States Bureau of Reclamation. Recognizing that the intense public use of this area was leading to serious water quality problems in each of the three lakes, the Colorado legislature, in 1971, created the Three Lakes Water and Sanitation District in an attempt to provide a mechanism to deal with those problems. See 1971 Colo. S.L., S.B. 371, codified as §32-10-101 et seq., C.R.S. 1973. That organic act vested the District with the responsibility of submitting to the Grand County Commissioners ". . . a comprehensive master plan for the development, maintenance, operation, and financing of a proposed sanitary sewer transmission and disposal system" by December 31, 1972. §32-10-179, C.R.S. 1973.

The District did develop such a master plan. See Regional Water Quality and Sewage Master Plan for the Three Lakes Water and Sanitation District (NHPQ, 1972). The District also submitted its application for a grant for partial funding of its wastewater collection system and a facilities plan to the EPA Region VIII office in Denver, Colorado. In a letter dated August 4, 1975, the EPA notified the District that its proposal was not in the best interests of the environment and would not therefore be approved. Letter from Regional Administrator Green to Three Lakes District Board, August 4, 1975. We are informed that the District is in the process of revising its proposal prior to resubmission thereof.

In disapproving the District's proposal, the EPA cited eight specific aspects of the proposal as reasons for disapproval. One of these issues, as elaborated in the above-mentioned letter and a prior EPA position paper regarding the District's proposal, focused upon EPA's concern that the proposed system was "questionable on growth, growth location, and related land use issues." More specifically, EPA was concerned that funding of the system would generate significant nonpoint sources of water pollution within the three lakes area by encouraging land development and other land-disturbing activities, and thereby cause the water quality of the lakes to worsen rather than improve. Indeed,

an EPA study completed in 1974 had concluded that failure to control nonpoint sources of water pollution within the three lakes area could degrade existing water quality. As revealed in its position paper, the EPA was particularly concerned that the land use regulatory programs of Grand County and other local governments within the area were inadequate to control the nonpoint sources that the District's project might generate.

It was from the above-described EPA concern that the current study evolved. As the statement of purpose in the contract for this study provides:

> "The purpose of this contract is to prepare a report which analyzes all local governmental land use laws applicable to the Three Lakes area, in conjunction with applicable Federal and State laws, to determine the adequacy of these laws and administration for protecting water quality in the Three Lakes area from point and non-point sources of water pollution. The report will make recommendations to local government entities with jurisdiction in the Three Lakes area for strengthening the substance and administration of these laws to better protect water quality."

To achieve this purpose, the contract calls for the performance of six specific work items. These include:

1. A review of certain documents forming the historical public record on the wastewater facility treatment plan under consideration by the District. Contract, §6.a.

2. A review of certain EPA studies and documents to become familiar with the nature and control of nonpoint sources. Contract, §6.b.

3. Meeting with officials of the appropriate local entities within the three lakes region. Contract, §6.c.

4. Researching all land use-related plans, laws, regulations, and ordinances in effect in or adopted by any local governmental entity within the Three Lakes Planning Area to determine their effectiveness for preventing and controlling nonpoint sources of pollution. Contract, §§6.d., e.

5. Making specific recommendations for strengthening such when necessary. Contract, §6.f.

6. Proposing model ordinances or other legal mechanisms which could be adopted by Grand County to control such sources. Contract, §6.g.

In addition, the contract requires that the legislative history of §32-10-101 et seq., C.R.S. 1973, and the statute creating the Three Lakes Water and Sanitation District, be reviewed to determine the following:

1. Is the Three Lakes Water and Sanitation District required to construct a wastewater treatment system which does not discharge treated effluent into any of the three lakes (Grand Lake, Shadow Mountain Reservoir, Lake Granby)?

2. Is the Three Lakes Water and Sanitation District obligated to provide centralized sewerage collection and treatment service to all property owners within the District? Contract §6.h.

It should be noted that, despite the EPA's primary concern over the potential for nonpoint source pollution, the contract also calls for an analysis of local laws to determine their adequacy in regulating point sources as well. This study, therefore, will analyze such local laws and regulations from each perspective.

B. Nonpoint Sources Studied.

No legal analysis of the adequacy of the local laws and regulations in effect in the three lakes region in controlling nonpoint sources of water pollution could be undertaken without an awareness of the nonpoint sources existing in the Grand Lake area. This information was provided by the engineering consultant for this project who, acting pursuant to the contract for this study, based its determination upon certain EPA studies and documents, see §6.b. of attachment to contract, and upon its knowledge of conditions in the three lakes area. The engineering consultant's conclusions were delivered to the legal consultant by a letter of September 1, 1976. See Appendix.

In its letter, the engineering consultant defined a nonpoint source of water pollution as one which is nondiscreet and diffuse and not amenable to conventional treatment. The consultant noted that the EPA studies identified sediment as the main source of nonpoint source pollution, with construction, silviculture, urbanization, agriculture, mining, and hydrographic modifications as the primary contributors of sedimentation and other pollutants to surface and groundwater. In the three lakes region in particular, the engineering consultant identified urbanization and

related construction activities as the major activities contributing to sedimentation, finding that the other activities produce only minor sedimentation. The consultant went on to identify further the following specific activities as generators of nonpoint source water pollution:

> "Construction of buildings, roads and related structures. In many cases construction is preceded by clearing of the site followed by excavation for basements or foundations. The cleared and excavated material is left unprotected and exposed to wind and water erosion. Roads and driveways are often constructed with little or no consideration of drainage patterns resulting in steep slopes susceptible to gullying and washing. Unpaved roads with open drainage ditches on each side provide a continuous source of sediment that is transported by wind, rain and melting snow.
>
> "Motor bike, horse and hiking trails disturb vegetation and create channels for surface runoff. In addition to natural sediments derived from erosion such trails also provide a source of man made debris.
>
> "Campgrounds provide areas of little or no soil cover accompanied by man made trash and debris that is susceptible to wind and water transport to the lakes.
>
> "Urbanization of areas around the lake provide paved streets, parking lots, shops, restaurants and concentrations of people which generate sediment and other pollutants.
>
> "Lawn watering and washing of cars, docks, boats and gas pumps also contribute sediment and other pollutants. Runoff from fertilized lawns is high in nitrate. Water used to wash cars, boats, gas pumps and work areas also transmit sediment and other pollutants."

The engineering consultant also identified other nonpoint sources in the three lakes region as:

1. Boats, contributing oil, grease, waste, and trash.

2. Animal waste from horses, domestic pets, and roaming dogs.

3. Thermal pollution, contributed by cutting of trees along shorelines, resulting in increased growth of aquatic plant life.

The legal analysis of existing local laws and regulations undertaken by the legal consultant largely reflect the findings of the engineering consultant. Most if not all of the recommendations for strengthening existing laws or proposing new ones revolve around the need to control the specific pollutant sources identified by it.

C. Assumption of Nonpoint Source Generation.

As of the date of this study, a number of proposed projects for treatment facilities have been considered by the EPA and the District. For example, the District has proposed a new regional collection system with central treatment south of Lake Granby. In rejecting this proposal, EPA suggested an upgrading of existing facilities combined with certain other measures as an alternative. Letter of Administrator Green, August 4, 1975. We are informed by its attorney that the District is now considering a system differing from both of the above. In addition, the District has previously considered a number of other potential types of treatment facilities.

For the purposes of this study, the consultants have not studied the adequacy of local laws and regulations in terms of any one or more of the specific facilities plans proposed or considered by the District or by the EPA. Rather, it has been assumed that the construction of any new treatment facilities or major upgrading of existing facilities will generate land development and other land-disturbing activities which will in turn result in the increased introduction of certain nonpoint source pollutants into the lakes. Based upon this assumption, local laws and regulations have been studied to determine their adequacy for minimizing the introduction of any such pollutants into the lakes. This approach conforms to the mandate of the study contract, which does not attempt to confine the study to a review of the impact of the implementation of one or more specific plans upon the water quality of the lakes. It is hoped that this approach will also prove more useful to the District and other entities concerned with the lakes' water quality by providing a broadly-based rather than narrow review of the problem under study.

D. Local Laws and Regulations Considered.

The study contract requires review of all land use-related laws, regulations, ordinance, and plans officially adopted or enacted by all governmental entities within the

Three Lakes Planning Area, Contract, §6.d., which area constitutes that area encompassed within the jurisdiction of the Three Lakes District Planning Commission. These entities include all or part of each of the following:

1. Grand County;
2. Town of Grand Lake;
3. Grand Lake Water and Sanitation District;
4. Shadow Mountain Sanitation District;
5. Columbine Lake Water and Sanitation District;
6. North Shore Water and Sanitary District;
7. Three Lakes Water and Sanitation District;
8. Metropolitan Recreation District;
9. Three Lakes District Planning Commission.

An extremely broad interpretation of the phrase "land use related laws, regulations, and ordinances" was made by the consultants, and the various entities identified above were requested to provide the consultants with any applicable materials even if remotely related to land use regulation. As subsequent sections will indicate, even utilizing such an approach, it was discovered that several of the named entities had no ordinances which fit within the contract's categorization. Indeed, some had developed no laws, regulations, or ordinances of any kind. Where such is the case, note will be made in the subsequent appropriate section. In all other cases, pertinent matter has been reviewed and commented upon.

E. Contact with Local Officials.

The consultant has contacted, explained the study to, and sought the assistance of at least one official or employee of each of the entities named in §I.D., supra. In addition, the legal consultant appeared on November 1, 1976, at a public meeting of the Board of County Commissioners of Grand County to present its preliminary conclusions in this study. Each of the commissioners, as well as certain members of the county planning staff, was present at that meeting. The legal consultant also appeared at a similar meeting on January 3, 1976, to present its draft study for the review and comments of interested parties, and to receive criticisms and suggestions thereon.

F. Relationship to §208 Areawide Waste Treatment Planning and Management.

Section 208 of the Federal Water Pollution Control Act Amendments of 1972 requires that areawide waste treatment management plans be developed for certain areas having high urban-industrial or other water quality problems. A major facet of that planning, and of the subsequent management of

the plan, is the reduction of the kinds of point and non-point source water pollutants which are degrading the three lakes. As of this writing, the Northwest Council of Governments, whose boundaries include Grand County, is preparing a §208 plan which will include the County. It can probably safely be said that the plan will present ways of controlling the sources identified by the consultant and other sources in order to enhance the lakes' water quality.

Despite the apparent overlap of the efforts of the Northwest COG and of the consultant herein, this study has been carried out without reference to the ongoing §208 planning effort in Grand County. Because the §208 plan for the Northwest COG is still not near completion, because the three lakes region constitutes only a small portion of the COG, and because the contract for this study demanded it, the consultant has prepared this study independent of any requirements which §208 or the plan developed thereunder may impose upon the entitites under study herein. Those entities should be aware of the fact that they may in the future become responsible for taking measures similar to some of those suggested herein in order to regulate the introduction of water pollutants into waters within their respective jurisdictions. This study must not, however, be envisioned in any way as a substitute for §208 planning or a reason for nonparticipation therein.

II. REVIEW AND ANALYSIS OF LOCAL PLANS, LAWS, REGULATIONS, AND ORDINANCES, AND SPECIFIC RECOMMENDATIONS FOR IMPROVING SUCH.

The main focus of this study concentrates upon the review and analysis of local plans, laws, regulations, and ordinances in effect in the Three Lakes Planning Area to determine their adequacy for controlling point and nonpoint sources of water pollution. This review will result in certain specific recommendations for strengthening, where necessary, the existing regulatory schemes. Though these requirements are set out in three separate sections of the study contract, see §6.d.e.f., each will be discussed within this section. This will enable specific recommendations to be made in direct conjunction with perceived weaknesses in the various materials studied. It is intended by this procedure to avoid undue duplication in the study and to provide an easy reference for the reader. Each particular plan or regulatory device of the local entities studied will be discussed individually.

A. Grand County.

Due to the fact that the primary land use jurisdiction over the majority of the private land within the three lakes region is in Grand County, the County will be the entity responsible for the regulation of most of the development which will result from any new or upgraded treatment facilities. As a result, the effectiveness of its land use regulations is of special importance in this study. The consultants have reviewed and analyzed the following County maps, plans, and regulations:

1. Master Plan;
2. Zoning Regulation;
3. Subdivision Regulation;
4. Individual Sewage Disposal Regulation;
5. Building Code;
6. PUD Regulation.

The results of the review are outlined below.

1. Conclusion.

Certain existing local regulations need improvement in varying degrees to protect water quality from potential nonpoint sources. Also, there is a need for certain new regulations which do not currently exist.

2. Master Plan (As Adopted in January, 1970).

Several significant features of the Master Plan, if implemented, might create nonpoint source problems.

a. Mineral Point as Ski Area.

Mineral Point on the west side of the Kawunechee Valley is suggested as a possible ski area site. Construction or upgrading of wastewater treatment facilities would add impetus to develop such, which would in turn generate a significant amount of residential and commercial development. This would lead to introduction of construction and urbanization nonpoint sources, as well as certain others, into the lakes via the North Fork of the Colorado River which runs through the valley. The Master Plan itself does not specify any intent to control nonpoint sources generated by this or other development. These are found, if anywhere, in the regulatory tools implementing the Plan, such as zoning, discussed below.

b. Potential Land Use Map.

A map appended as a part of the Master Plan delineates potential areas for future residential, commercial, and other development. A large part of such is shown to be located along the shores or in the very near vicinity of the lakes or streams tributary to the lakes. While this does not mean that point or nonpoint source pollution is inevitable, it does create a significant risk thereof in the absence of adequate controls. No such controls are proposed in the Master Plan.

c. Capital Improvements.

The Master Plan contains an important section establishing certain criteria for the evaluation of proposals for capital improvements. This section could assume significant importance in evaluating any proposals by the District under §32-10-179, C.R.S. 1973. None of these criteria specifically address the developmental impacts of such proposals or the nonpoint sources which might be generated thereby. Arguably, however, these considerations could be made under criteria No. 3 dealing with protection of local resources or criteria No. 8 dealing with the aesthetic qualities of the area.

d. General Considerations Re: Master Plan.

If nonpoint sources are to be regulated in accordance with the Master Plan, substantial revision of the Plan to record this intention is necessary since the Plan makes no mention of that or any other "environmental" concerns.

County authority over the actual location of any new treatment facilities or any upgrading of such might be exercised under the Master Plan under §30-28-110(1), C.R.S.

1973. That section states that, whenever a county has adopted a master plan, no public way, ground, space, or other structure or no public utility may be constructed or authorized unless the proposed location and extent have been submitted first to the county planning commission. If Grand County were to amend its Master Plan to comprehend the above items, the County could possibly alleviate nonpoint source problems before they occur by regulating the scope of the proposed facility in accordance with the County Master Plan. This would not eliminate the need for subsequent zoning, subdivision, and other controls, but might make regulation thereunder easier by providing a manner by which to reduce the scope and extent of the facilities, and thus the land use impact resulting therefrom.

There are two caveats which must be offered. The first concerns administrative review of any planning commission disapproval of a facility site. That disapproval may be overturned by a vote of the county commissioners or by the body or official having jurisdiction over authorization or financing of the project. §30-28-110(1)(b), (c), C.R.S. 1973. If the District is such a body, it could overturn any disapproval despite the plan (as could the County Commissioners, though they might feel more of a duty to comply with their own plan). Since the District has responsibility for constructing, maintaining, and operating any facilities, it is arguable that it would be the body with ultimate jurisdiction. Section 30-28-179, C.R.S. 1973, may be to the contrary. It provides:

> "Not later than December 31, 1972, the board shall submit to the board of county commissioners of Grand county a comprehensive master plan for the development, maintenance, operation, and financing of a proposed sanitary sewer transmission and disposal system. The master plan shall contain provisions for the acquisition or utilization, by purchase, lease, or other agreement, of existing facilities planned, constructed, or operated by existing municipalities and special districts having area within the boundaries of the district. The board of county commissioners shall proceed to hold public hearings on the master plan in like manner as provided in part 2 of article 1 of this chapter, relating to service plans." (emphasis supplied)

No indebtedness may be incurred by the District prior to County Commissioner approval of the District's Plan. Despite the general jurisdiction of the District over its own facilities, this section may mean that the County Commissioners would be the proper body to review any Planning

Commission disapproval, since it appears to provide the Commission with jurisdiction over authorization and financing of the District's facilities. Such might well mean that any Planning Commission disapproval would be more likely to stand, and would in any case mean that the County would have ultimate authority over the location and extent of the District's facilities -- giving it indirect control over their impact.

The second caveat concerns the County's existing approval of the District's Master Plan in March, 1973. It may be that this approval forecloses any further necessity or possibility of further County review of District plans. It is arguable that the County is not so foreclosed.

The master plan which the County approved is the "Regional Water Quality and Sewage Master Plan for the Three Lakes Water and Sanitation District," developed by Nelson, Haley, Patterson, and Quirk (NHPQ). That plan, at page 49, presented the following alternative methods of sewage disposal:

> "1. Vaulting the sewage and trucking it out of the basin for treatment;
>
> "2. Individual non-discharging treatment facilities for each user;
>
> "3. Numerous sewage treatment plants to treat sewage from small clusters of users;
>
> "4. Several larger plants to treat sewage from major collection centers; and
>
> "5. A single collection, transmission and treatment system for the entire area."

After reviewing each of these proposals, NHPQ recommended that ". . . a regional sanitary sewer system . . ." having sufficient collection, transmission, treatment, and disposal facilities to serve all by a limited number of isolated facilities be adopted. This is alternate No. 5 of those listed. Such were the recommendations approved by the Grand County Commissioners.

In view of the foregoing, the following arguments may be asserted for the claim that future commissioners' approval is not foreclosed:

1. The County Commissioners would be entitled to approve a separate District plan should the EPA eventually reject the existing and once-approved

plan. It would seem that drafting of a new plan would require new Commissioner action under §3210-179, C.R.S. 1973.

2. Even if an entirely new plan is not required, the County Commissioners would be entitled to reapprove the District's plan if the recommended alternative is not implemented or if any changes therein are required by the EPA. A review of the Master Plan indicates that the County Commissioners can be said to have approved only the recommended alternative. No information as to the "location or extent" of any of the other alternatives was presented in the study. Thus, approval of the Master Plan by the County Commissioners under §32-10-179, C.R.S. 1973, may not constitute approval of the "location or extent" of the nonadopted alternatives under §30-28-110, C.R.S. 1973. Similarly, if EPA did approve a variant of the original plan, its action in doing so would nullify original County approval. The County would, therefore, be required to reapprove any variations in the original Plan.

Acceptance of the foregoing arguments would permit the County to reapprove the District's Master Plan. The arguments are speculative to the extent that they depend upon certain facts which may not yet have been determined. Consideration of this approach should be made, however, due to the important authority the County may be able to derive from §30-28-110, C.R.S. 1973.

There may be an additional reason for amending the County's Master Plan. Under the Special District Control Act, the Board of County Commissioners is authorized to approve or disapprove the service plan of a proposed special district, such as water and sanitation districts. §§32-1-203, 204, 205, C.R.S. 1973. Among the grounds upon which disapproval may be based is that the District service plan fails to conform substantially to the County master plan. §30-1-205(1)(g), C.R.S. 1973. It is arguable that this provision may provide Grand County with authority to review final District facility plans even if it is now foreclosed from exercising its §30-28-110 powers with regard to master plans. There are certain difficulties with this contention.

Jurisdiction to approve a facility plan attaches when a petition for the formation of a new proposed special district is filed in the district court. §32-1-203, C.R.S. 1973. The Three Lakes District was formed by the Colorado legislature in 1971. Unless it can now be successfully argued that approval of the District's plan is now possible

on the basis that the County had no prior opportunity to act under the Special District Control Act, the Act's applicability seems questionable. This may be particularly true in light of the 1973 review of the District Master Plan.

A second problem centers on the question of whether approval of the District's Master Plan constituted, for all purposes, service plan approval. Section 32-10-179, C.R.S. 1973, provides that review of the District's master plan by the County shall proceed as review of a service plan under §32-1-201 et seq., C.R.S. 1973. The legislature may have eliminated separate service plan review by inclusion of this section.

In light of the above problems, the Special District Control Act may not be useful to the County. It is worth considering despite this, however, because of the land use control benefits which could be achieved by its application.

3. Zoning Regulations.

a. Purpose and Scope.

The zoning regulations prohibit the use of buildings, structures, or land, and the construction and alteration of buildings or structures except as specified therein.

b. Enumeration of Districts.

Grand County's zoning resolution divides the County into eight types of districts. A brief description of each follows.

(1) Estate District.

The estate district is the most restrictive of the eight types. It permits single-family development as of right on lot sizes as follows:

--unsubdivided land, two acres;
--subdivided land not served by water or sewer facilities, one acre;
--subdivided land served by either water or sewer facilities, 20,000 sq. ft.;
--subdivided land served by water and sewer facilities, 10,000 sq. ft.

In addition it permits certain agricultural uses, recreational uses, and public utility uses as of right. Certain lot width, setback, and building height limitations are provided.

(2) Residential District.

Single- and multi-family dwellings, boarding houses, and rest homes, medical offices, and clinics are permitted as of right. Lot sizes, corresponding to the same categorization described in conjunction with the estate district, are two acres, 30,000 sq. ft., 15,000 sq. ft., and 7,500 sq. ft., respectively. Certain agricultural, recreational, and public utility uses may also be maintained as of right. Lot width, setback, and building height restrictions are also included.

(3) Accommodations District.

All uses permitted in the residential district, plus hotels, motels, lodges, and cabins are permitted as of right. Outdoor recreational uses, provided all uses retain natural environmental conditions and are not objectionable due to excessive noise, dust, odors, or vibrations, are also permitted as of right. Camping areas are permitted by special use. The minimum lot size is one acre. Lot width and setback restrictions also apply.

(4) Forestry and Open District.

All uses in the residential and accommodations districts and commercial feed yards, fur farms, kennels, and riding stables are permitted as of right. By special use permit, airports, cemeteries, radio transmitters, water treatment facilities, landfills, sewage disposal sites, lumber and ore mills, quarries, sand and gravel operations, and mobile homes appurtenant to agricultural uses may be located. Lot area must be at least two acres and lot width 200 feet. No other restrictions are applicable.

(5) Mobile Home District.

All uses permitted in the residential district and individual mobile homes are permitted as of right. Mobile home parks are a special use. Minimum lot sizes are the same as those specified in the residential district. Minimum lot width is as follows:

--unsubdivided land, 200 feet;
--subdivided land not served by sewer or water, 120 feet;
--subdivided land served by either sewer or water, 60 feet;
--subdivided land served by both sewer and water, 60 feet.

Setback and building height restrictions are provided.

(6) Tourist District.

All uses enumerated in the residential and accommodations districts are permitted as of right. In addition, general business uses are permitted as of right provided that no objectionable amounts of noise, odor, dust, smoke, or vibration are emitted beyond property lines, and outdoor storage is enclosed. Minimum lot size is one acre. Lot width and setback restrictions exist.

(7) Business District.

All uses in the residential, tourist, and accommodations districts are swept into this zone as of right. Gasoline stations and other enumerated business and commercial uses are permitted, the latter being subject to the restriction that they emit no objectional noise, odor, smoke, dust, or vibration beyond the Business District and to the restriction that outdoor storage be enclosed. Mobile home parks are a special use. Minimum lot size is one acre.

(8) Unclassified District.

The unclassified district permits by right all uses which are not otherwise unlawful; certain enumerated industrial uses require special use approval. All uses which may be offensive or obnoxious are also required to be submitted to special review. The only expressed restrictions are a 30-foot front yard and a 200-foot setback from adjoining district restriction.

c. General Considerations Regarding Zoning Districts.

(1) Encourage Intensive, Sprawling Land Use.

Under the existing zoning regulations, all private land in the three lakes region is subject to development upon lot sizes of no more than two acres and a large portion is subject to development on sizes down to 7,500 sq. ft., due particularly to the cumulative zoning approach of the County. Uses which may be instituted on such lots run the gamut from residential to accommodations to various business and commercial uses. Most of these uses are permitted as of right. The sort of development encouraged by such a zoning scheme, in the absence of other controls, would likely result in an intensive, urbanized usage of private land in the district. This type of land use, which is easily subject to enhancement by the provision of public, centralized sewage disposal, could create substantial construction- and urbanization-related nonpoint sources of water pollution, including

increased sedimentation. It is particularly interesting to note that in each district the intensity of residential use is allowed to increase, thereby potentially increasing nonpoint sources, when public sewage disposal is provided as would be the case if one of the District's proposals were accepted. Thus, while point source pollution might be reduced, nonpoint source pollution might be increased at an accelerated pace by such a provision.

(2) Lack of Water Quality Related Standards.

One of the most glaring omissions in the zoning district scheme is the apparent lack of water quality-related standards for the siting of developments. Only the accommodations district takes into account environmental considerations specifically. Certain others attempt to account for the nuisance-type effects of business, commercial, and industrial uses. No district, however, expressly mentions water quality as a siting standard or attempts to regulate uses within such in accordance with water quality impacts. Certain techniques appear to be readily available.

Setbacks from lakeshores or watercourses would aid in ameliorating water quality problems. This technique would conform easily to the existing zoning scheme, which currently provides for setbacks. Standards would need to be developed by the County planning office.

Institution of certain new zones or districts, a more radical step, might also prove helpful. Section 30-28-111, C.R.S. 1973, provides, inter alia, county authority to zone for the location and use of buildings and structures for trade, industry, residence, recreation, public activities, and other purposes, and for use of land for trade, industry, recreation, and other purposes. Section 30-28-115, C.R.S. 1973, permits zoning regulations to be adopted to reduce excessive numbers of roads, and thereby runoff from the same, and to secure safety from floodwaters and other dangers. These provisions, liberally construed, provide authority to enact new zoning schemes designed to regulate for the maintenance of water quality. To regulate development along watercourses, the floodplain authority might be invoked. §30-28-111, C.R.S. 1973.

If there is any doubt that the foregoing sections permit land use regulation to enhance water quality, it is resolved by the provisions of H.B. 1034, §29-20-101 et seq., C.R.S. 1973. That statute permits regulation of land use:

1. In hazardous areas. §29-20-104(1)(h), C.R.S. 1973. Certain areas with high nonpoint source pollution potential may be within this provision.

2. On the basis of the impact upon the land itself, community, or surrounding area. §29-20-104(1)(g), C.R.S. 1973.

H.B. 1034 also enables counties to otherwise plan for and regulate land use so as to allow an orderly use of land and to protect the environment. §28-20-104(1)(h), C.R.S. 1973.

The preceding authority would permit the County to adopt floodplain zoning (there are existing restrictions, §14.3 Grand County Zoning Regulations, but no floodplain districts), water quality impact zones or water quality influence zones (where nonpoint source pollution may be particularly severe if land is developed), impact analysis regulations, floating zones, or to simply strengthen its regulatory scheme within existing zones in order to permit planning for water quality impacts. Any actual regulations devised would be more effective, of course, if each of the sources listed in §I.B., supra, were regulated. It should be noted that, while the regulatory schemes suggested above relate to zoning, H.B. 1034 enables counties to regulate other than by traditional zoning techniques. Some of these techniques, including H.B. 1041, §24-65.1-101 et seq., C.R.S. 1973, regulation, are mentioned below. §III., infra.

A final suggestion for regulating development would center upon adoption of an agricultural district for the County. Zoning regulations to foster the state's agricultural economy are expressly authorized. §30-28-115, C.R.S. 1973. Provision for such districts in rural counties with growth impacts is common. See, for example, 1974 Rio Blanco County Ordinances. The particular usefulness of such districts is in reducing the intensity of land uses. This in turn aids in reducing the intensity of nonpoint sources. Since such a regulation is not directly addressed to nonpoint or point source amelioration, it must not be considered to be a panacea for all water quality problems, but rather only as a potential aid.

Finally, the fact that many uses in the above districts are instituted only through special use permits has not been ignored. The adequacy of such permits has been explored below. §II.A.3.d., infra.

(3) Review of Zoning Map.

Certain weaknesses in the zoning scheme may well be magnified by the county zoning map. Placement of certain

zones, in light of the uses permitted as of right or by special review therein, creates a potential for serious nonpoint water pollution. The Forestry and Open District, encompassing most of the private land in the three lakes region, as described above, for example, permits a number of uses which, without additional regulation, could present nonpoint problems. For example, quarries, sewage disposal areas, and/or mills might all contribute to sedimentation of the lakes or worse. Despite this, the F district borders portions of each of the lakes and extends to all private land in the sensitive Kawuneeche Valley. Institution of certain uses along a lakeshore or in a high-water table area of the Valley could present enormous pollution problems and be inherently antagonistic to achievement of water quality goals.

The tourist district, in which are permitted gasoline stations and other business and commercial uses with accompanying parking lots and other paved areas, is located largely along the southwest shore of Grand Lake and in a strip along the west shore of Shadow Mountain Reservoir. In the absence of other controls, both of these areas present considerable potential for nonpoint source pollution problems.

Residential development, as permitted in the residential district, can also create significant nonpoint loads. Residential zoning surrounds roughly three-fourths of the shore of Grand Lake and is located almost directly adjacent to Shadow Mountain and Granby Reservoirs as well. In the absence of added controls, a pollution hazard is apparent in this proximity, especially in areas of intense development.

d. Special Use Permits.

Section XI of the Grand County Zoning Regulations provides the special use permit review standards for those uses listed in §2.b., supra, as permitted by special use only. These requirements are in need of revision and strengthening.

The special review section requires that certain uses which may present land use hazards if constructed within a particular zone be reviewed and approved by the Board of County Commissioners prior to implementation. Such a procedure presents the County with a good opportunity to review various uses to determine what point and nonpoint source water quality impacts a land use will have. Unfortunately, no part of the special use section includes any direct reference to water quality impacts, and these do not appear to be accounted for by the regulations.

(1) Camping Areas.

Camping areas, specifically mentioned by the engineering consultant as a nonpoint source, are a special use in the A, F, T, and B districts. Review standards require a central sewage system approved by the Colorado Department of Health. No other environmental standards are found.

(2) Airports, Cemeteries, Water Treatment Plants, Landfills, Sewage Disposal Sites.

These uses, allowed by special permit in the F zone, are reviewed in accordance with no environmentally-related standards.

(3) Lumber and Ore Mills, Mines, Quarries, Sand and Gravel Operations.

While water quality is not mentioned specifically, a rehabilitation plan is required prior to approval of these uses, allowed by special permit in the F zone. Presumably, this would take into account water quality concerns. No water quality standards related to construction or operation of the uses exist.

(4) Mobile Home Parks.

Allowed by special permit in the M and B districts, certain review standards appear to contemplate environmental hazards. Water quality impacts are accounted for by the requirement that the park not produce soil erosion. No review standards directly related to water quality impacts exist.

(5) Unclassified Zone Uses.

The zoning regulations permit by right all uses in the U district which are not otherwise prohibited by law. Certain enumerated uses are by special review only. The special review requirements require that an explanation of materials to be used to minimize smoke, odors, noise, dust, explosion hazards, and similar environmental concerns be made. Arguably, impact upon water quality is such a concern. No specific water quality restrictions exist.

(6) Mobile Homes.

Individual mobile homes are a special use in the F zone when used by owner or operator of an agricultural use. The

only water quality-related standard requires that adequate sanitation facilities be available for the mobile home.

(7) Review Standards.

The Board of County Commissioners is vested with the authority to decide on special use permit applications. The regulation provides three review standards for that decision in §11.2. They are:

1. The purpose of the zoning regulation;

2. The unique conditions of the surrounding neighborhood;

3. The county-wide need for the use.

No standards directly related to water quality exist.

e. General Considerations Regarding Special Use Permits.

(1) Absence of Water Quality-Related Standards or Review Requirements.

While certain of the submission requirements and review standards can indirectly be said to take into account the point and nonpoint source water pollution aspects of the proposed uses, no express standards exist and, in the case of certain uses, no indirect references appear. This difficulty can be easily remedied by:

1. Adopting submission requirements with relation to each special use which expressly regulate the water quality aspects of a proposed use. Without attempting to draft specific requirements, those considered might include:

--a requirement that all point and nonpoint sources be eliminated or minimized;

--a requirement that an erosion control plan be submitted;

--a requirement that a drainage plan be submitted;

--a requirement that a sedimentation control plan be submitted;

--a requirement that a landscape or vegetation plan be submitted;

--a requirement that sewage and other waste disposal plan be submitted;

--a requirement that no special permit be granted until all other necessary water quality permits have been obtained from the local, state, or federal government.

2. Adopting certain review standards expressly related to water quality impacts. Review standards which require the Board to determine that all plans or specifications for minimized point and nonpoint impacts are satisfactory would be advisable, as well as a general prohibition that the proposed use shall not cause a direct or indirect discharge of pollutants to any receiving water.

It should again be noted that zoning to promote improved water quality appears to be well within the enabling legislation for counties. §§30-28-111, 115, C.R.S. 1973; §29-20-104, C.R.S. 1973. As a result, regulations such as those suggested above should be considered to be lawful.

(2) Expansion of Scope of Special Use Section.

There can be little doubt that institution of uses by special review affords the County a greater regulatory power over water quality impacts of uses than does establishment of a use as of right. For this reason, it might be advisable for the County to expand the scope of its special review section to include uses other than those currently enumerated therein. For example, commercial feed yards, fur farms, and riding stables are permitted as of right in all districts. The impacts of such uses, and particularly of feedlots, is recognized. See §208(b), FWPCA 1972; 40 C.F.R. §§124.11, 124.84, 125.4, 125.53. The County should consider making such uses subject to special review in accordance with the types of requirements and standards suggested in the preceding section. Similarly, gasoline stations or marinas which contribute grease and oil sources might also be subject to special review, as well as other uses contributing the types of nonpoint or point pollutants identified by the engineering consultant.

(3) Uses Which May Be Hazardous Per Se.

Certain uses, even if established under strengthened special review requirements might still present a hazard to water quality. A review of the zoning map, as undertaken in §II.A.3.c.(3), supra, indicates that certain uses permitted

by special review in the F district might create water quality hazards if located near the lake or a tributary stream. If data are available to confirm this suspicion, the County might be advised to severely restrict or prohibit such uses in certain areas. This might be accomplished through:

1. Zoning;

2. Floodplain regulations, whether part of zoning or otherwise;

3. Shoreline regulations, whether part of zoning or otherwise.

With respect to floodplain and shoreline regulations, H.B. 1041 might be of some assistance. See §24-65.1-101 et seq., C.R.S. 1973. Regulations under this statute will be discussed more fully in §III., infra.

f. Floodplain Regulation.

Regulation of development within floodplains is most often thought of as a means of protecting life and property from flood hazards. Such regulation, however, may also have an impact upon water quality to the extent it controls the washing of polluting debris into a watercourse or impoundment during a flood period.

Counties are authorized to zone to regulate development within floodplains. §30-28-111, C.R.S. 1973; see also §29-20-104, 1973 C.R.S., and §24-65.1-101 et seq., C.R.S. 1973. Grand County has adopted regulations dealing with development of land within floodplain areas. §14.3, Grand County Zoning Resolution. This section prohibits construction of any buildings or structures within a floodplain unless approved by the Board of County Commissioners, subject to several conditions, including:

1. That all buildings or structures offer minimum resistance to a flood and do not cause floodwaters to increase the natural flood channel;

2. That no dwellings be permitted;

3. That certain public buildings be prohibited;

4. That there be no storage of materials which could be moved by floodwaters within the channel.

The final condition above seems to come closest to protecting water quality from nonpoint sources.

Since floodplain regulations are not normally intended for or the best suited of available techniques for regulating water quality, no extended suggestions regarding such will be offered in this section. Certain additions to the Major Flood Channel section might be helpful to reduce flood-created water quality hazards. These suggestions, which center on the use of zoning as the regulatory technique, might include:

1. Prohibition of certain uses or structures which might result in serious water pollution impacts as a result of a flood. For example, open mines or similar uses, roadways, or parking lots might increase sedimentation resulting from flooding. Certain forms of on-site disposal systems might be sources of bacterial pollution.

2. Prohibition of certain land uses which might cause flooding of lands outside the flood channel and which might not fall within the terms "buildings" or "structures," see §§20(2), (10), Grand County Zoning Resolution, as are now prohibited by the regulations.

3. If the term "major flood channel" does not include both floodways and flood-prone areas (the term is not defined in the zoning regulation), expansion of the definition of the term to include such in order to expand the protection afforded by the regulation. Flood-influence areas, those areas in which development may increase base flooding, might also be regulated to expand the protection afforded by the regulation. See §6-101 et seq., Colorado Land Use Commission Model Land Use Regulations; see also §24-65.1-101 et seq., C.R.S. 1973.

In general, it would be advisable for the County to consider adoption of a separate regulation under §§29-20-101 et seq. or 24-65.1-101, C.R.S. 1973, to control floodplain development, particularly from the viewpoint of reducing flood-induced water pollution sources. Such regulations will be discussed in more detail in subsequent sections of this study. §III., infra.

g. Amendments to the Zoning Resolution.

The County zoning resolution may be amended. §17.1, Grand County Zoning Resolution. The Board of County Commissioners is responsible for deciding upon rezoning applications. No review or submission standards exist.

A change in zoning can result in a change in the pollution potential of the area rezoned when, as is the usual case, land is rezoned to a more intense use. Since the enabling legislation provides no standards for rezonings, the only standards by which such are to be judged are those developed by court decisions and those expressed in the local zoning resolution. Cases on the subject do not establish water quality-related standards for review of rezonings. See, for example, Holly Development Co. v. Board, 140 Colo. 95, 342 P.2d 1032 (1959); Garrett v. Littleton, 177 Colo. 167, 493 P.2d 370 (1970); Clark v. City of Boulder, 146 Colo. 526, 362 P.2d 160 (1961). As a result, it is all the more important that certain standards be included within the zoning resolution itself. Consideration should be given to including the following within the amendment section of the County's resolution:

1. Requirements for the submission of data and plans which would allow the County to evaluate fully the water quality impacts of the proposed rezoning from a point and nonpoint source perspective. These standards could be general or specific in cases where the rezoning is sought in conjunction with a specific use.

2. Review requirements which require the Board to consider point and nonpoint source water pollution in the granting or denial of a rezoning.

A review of the County enabling legislation would indicate that such requirements are lawful. §§30-28-111, 115, C.R.S. 1973; §29-20-104, C.R.S. 1973. Similar approaches have been utilized by rural counties in the state which face growth problems. See, for example, 1974 Rio Blanco County Ordinances and 1975 Morgan County Zoning Resolution.

h. Variances.

Section 16.2 of the Grand County Zoning Resolution authorizes the Board of Adjustment to grant variances to the lot size, lot width, and setback requirements of the resolution. The Board is expressly prohibited from granting a variance which would allow a use not otherwise permissible within a district. §16.2(2). Variances may be granted when certain exceptional conditions of the building or land for which the variance is sought would cause unnecessary hardship if the zoning resolution were strictly applied. The variance section contains no standards which would prohibit any variance which created or enhanced any point or nonpoint source of water pollution. The county enabling legislation for variances, found at §30-28-118(11)(c), C.R.S. 1973,

establishes two standards, one or possibly both of which might prohibit any variance which caused such problems:

1. No variance may create substantial detriment to the public good, i.e., health, safety, welfare, morals, convenience, order, or prosperity. See §30-28-115, C.R.S. 1973.

2. No variance may substantially impair the intent and purpose of the zoning plan or resolution.

Since only "area variances" and not "use variances" are permitted by the Grand County Resolution, the potential for water quality degradation resulting from the grant of a variance is diminished. The loosening of a setback restriction, for example, will ordinarily result in a lesser degradation of water quality than allowance of an intense use in a rural district. Since "area" variances can impact water quality in certain cases, however, as for example when a shoreline setback requirement is waived, standards should be included in the ordinance. The following are suggestions:

1. Include in the variance section review and submission standards demonstrating to the Board of Adjustment that no point or nonpoint source impacts will result from the grant of a variance and requiring a finding of such by the Board as a condition of the variance. Such standards, like those mentioned in previous sections, appear to be entirely lawful. §§30-28-111, 115, 117, C.R.S. 1973; §29-20-104, C.R.S. 1973.

2. Revise the Zoning Resolution to include a statement of purposes which establishes as one of the purposes of the ordinance the protection of the quality of the three lakes and all other water bodies or courses in the County. This would trigger the aforementioned requirement of §30-28-117(1)(c), C.R.S. 1973, that no variance substantially impair the intent and purpose of the resolution. It would also establish a clear and explicit basis for the resolution which would aid in its enforcement and would add support to the exercise of the numerous other powers described and suggested in this section.

3. Subdivision Regulations.

a. Purpose and Scope.

The Grand County Subdivision Regulations are adopted for the purposes expressed in §1-3 thereof. That section

provides that the regulations are for the purpose of promoting the health, safety, morals, and welfare of the present and future inhabitants of the County. These are to be achieved through the proper arrangement of streets, adequate open spaces for traffic, utilities, fire-fighting, civil defense, recreation, sites for schools and educational facilities, light and air for avoiding congestion of population, and for regulating other matters which the Planning Commission and Board of County Commissioners deem necessary in order to protect the best interests of the public. See former §106-2-34, C.R.S. 1963.

To achieve these purposes, the County requires approval of any subdivision or resubdivision of land prior to construction. §1.5, Grand County Subdivision Regulations (GCSR). Penalties for failure to comply with the regulations are provided.

As in the case of the County's zoning regulations, the "purposes" section fails to state that the regulations are adopted for, inter alia, the maintenance of water quality. While such a purpose may be contemplated within the general purpose provision, it would be to the advantage of the County to adopt such a purpose expressly to insure that water quality is a regulatory focus of the regulations and to make action directed toward the preservation thereof more easily defensible. There is little doubt that such a purpose is contemplated by the current statutes which are applicable to subdivision regulation. Foremost of these is S.B. 35, adopted in 1972, as codified in part at §30-28-133, C.R.S. 1973. Standards and procedures authorized by that act contemplate subdivision regulation as a means of regulating point and nonpoint sources. See, for example, §30-28-133(3), (4)(b). Other statutes equally applicable to subdivision regulation also provide that authority. See §29-20-104, C.R.S. 1973, §24-65.1-101 et seq., C.R.S. 1973.

A concern about the scope of the subdivision regulations has been raised by the Grand County Attorney, Richard Doucette. Mr. Doucette is concerned that, as written, the subdivision regulations do not apply to hotels, motels, and lodges. This would appear to be so. The definition of subdivision at §1.6(4) of the regulations includes, with certain exemptions, only land divided into two or more parcels, separate interests, or interests in common. See also former §30-28-101(10), C.R.S. 1973. This definition would not normally apply to hotels, motels, and lodges because these developments are generally of a unitary nature. In view of the existing and potential use of the subdivision regulations to regulate water quality impacts (which may be severe for motels and the like due to the

large parking areas they normally require), this omission is serious, and should be rectified by an appropriate amendment to the definitions section.

In 1974, the Colorado legislature amended the definition of subdivision to include not only land divided into two or more parcels, separate interests, or interests in common, but also to include any parcel of land to be used for condominiums, apartments, or other multiple-dwelling units. §30-28-101(10)(a), C.R.S. 1973, as amended. Grand County may not adopt a regulation less restrictive than that required by the state and hence must adopt the amended definition. Once adopted, hotels, motels, and lodges, as "other multiple dwelling units" would be encompassed by the regulations. As a result, it would appear that the County must regulate hotels, motels, and lodges by state mandate.

b. Exemptions.

Section 1.6(4)(d), GCSR, authorizes the County Commissioners to exempt from the definition of subdivision, §1.6(4), GCSR, by regulation or resolution, any division of land if they determine such not to be within the purpose of the regulations. No submission requirements or standards for the review of exemption applications exist. As in the case of the various regulations discussed above, this potential weakness of the subdivision regulations can be remedied fairly simply by:

1. Inclusion of requirements for submission of data and materials sufficient to demonstrate the water quality impacts of a proposed exemption.

2. Review standards requiring a finding by the Board of County Commissioners that the proposed exemption will not result in point or nonpoint water quality impacts if granted.

It would appear that the express wording of §30-28-101 (10)(d), C.R.S. 1973, as bolstered by the provisions of §§29-20-104, 24-65.1-101 et seq., and 30-28-133, C.R.S. 1973, make such regulations lawful. A similar approach, although not primarily directed at water quality considerations, has been taken by Rio Blanco County. See 1974 Rio Blanco County Ordinances, §402.6.

c. Special Site Considerations.

In general, the special site considerations of the subdivision regulations provide a good approach to the problem of regulating development on the basis of impact upon the land to be developed and the hazards presented to the

development by the unique characteristics of the land. §2.1, GCSR. The regulations take into account unique site characteristics having to do with steep, unstable, and swampy land, land subject to inadequate drainage, avalanche, rock slides, geologic hazards, and flooding, as well as special considerations dealing with proximity to railroad rights-of-way. Unfortunately, no express provision of the regulation accounts for impacts of development upon nonpoint sources, particularly erosion and sedimentation, though such can arguably be included within "geological hazards."

In light of the fact that the development of subdivisions in certain areas, due perhaps to soil conditions, slope, or proximity to watercourses on the lakes themselves, can present more serious water quality hazards than in others, it may be advisable to include such sites within §2.1 of the regulations and to require submission of pertinent information therefor. The regulations should then go one step further and establish express design standards to minimize impact and review requirements which impose upon the appropriate county body the duty to determine that no degradation of water quality will be caused by the subdivision. Such standards appear to be clearly authorized by the enabling legislation. §§30-28-133(3), (4), 29-20-104, 24-65.1-101 et seq., C.R.S. 1973.

The special site considerations contain restrictions upon subdividing within a flood hazard area, which are generally good. §2.1(5). See, for example, the prohibition on solid waste disposal within a flood channel. Similar provisions appear within the County's zoning resolution. In order to insure comprehensive review of such problems at one review stage, it might be advisable to regulate such concerns within one regulation, which could be separate from either the zoning or subdivision regulation and which would regulate all land use and construction within a floodplain area. See §24-65.1-201(1)(b), C.R.S. 1973; see also §29-20-104, C.R.S. 1973. Model Regulations promulgated by the Land Use Commission, as discussed in §III., infra, offer a fairly comprehensive approach to flood hazard problems. See §6-101 et seq., LUC Model Regulations.

One specific addition to the flood hazard section which should be considered is found in the special design standards for apartments, etc., in §5.4(1)(a)(vi), GCSR. That section expressly requires the location of individual sewage systems to minimize contamination during flooding. There appears to be no reason why the same provision should not be adopted in the general design standard section.

d. Dedications and Public and Private Reservations.

The dedication requirements of §2.5, GCSR, require dedication of streets and drainage and other utility easements and of 20% of the total subdivision area for parks, greenbelts, or flood channels. The location of such areas is to be determined by the Planning Commission and subdivider, with recommendations from other public agencies. Section 2.5 also establishes a requirement that reference be made to the County's Comprehensive Plan in order to locate utilities. Two items regarding §2.5 are worth mentioning.

It may be that careful location of open areas dedicated under §2.5 can aid in controlling water quality, particularly as related to nonpoint source problems arising from a subdivision. Thus, open areas may be located to serve as buffers between developments and watercourses or water bodies. While §30-28-133(4), C.R.S. 1973, the section authorizing dedications, does not expressly authorize the use of dedications as buffer zones (it speaks only in terms of school or park sites), a dedication for a park which in turn acts as a buffer zone would appear to be lawful. Indeed, §30-28-133(4)(a)(III), C.R.S. 1973, authorizes dedication of sites and land areas ". . . for the use and benefit of the owners and future owners . . ." in the subdivision. Arguably, this may authorize dedications of land for maintenance of water quality purposes alone.

Section 2.5, as noted, provides that public facility locations be determined with reference to the County plan. The plan has been discussed in §II.A., supra, where it was noted that it established few, if any, water quality-related standards for location of utilities or other public facilities. Section 2.5 may provide additional reason for amending the plan.

e. Design Standards for Drainage, Sewer, and Water.

Section 2.6, GCSR, provides certain design standards for storm drainage systems and sewer and water supply systems. See also §2.2(5), GCSR. Subsection (1)(a) prohibits subdivisions in flood-prone areas or floodplains unless flooding is alleviated. Subsection (a)(2) requires that onsite sewage disposal comply with applicable county regulations and that other sanitary sewers comply with the state Board of Health regulations. Information provided to the legal consultant at the November 1, 1976, meeting with the Grand County Commissioners indicates that serious problems exist with regard to these sections of the regulations.

At the November 1, 1976, meeting, the legal consultant was advised that the storm water runoff, after collection, was discharged without treatment. While such a system may help to control flooding or innundation of basements or streets, it creates serious hazards to water quality in the three lakes region. The heavy pollutant loads characteristic of storm water runoff, including sediment, oil, and other urban-related sources, will damage the water quality of the lakes as well as tributary streams. Additional development in the area will only serve to accentuate this problem. The EPA has recognized that storm sewer discharges represent a significant source of water pollution. As a result, it has applied its NPDES program to include publicly-owned storm sewers in urban areas and certain rural areas in which storm sewers are designated as significant contributors of pollution. 40 C.F.R. 125.52. In other rural areas, they will be regulated as nonpoint sources. Id.; see 41 F.R. 11303, Mar. 18, 1976. No part of the three lakes region is considered an urban area or been so designated. The burden of regulation therefore falls upon local governments. In such an instance, the Grand County regulations are inadequate and would be increasingly so if growth were increased by construction of the Three Lakes system.

It should be noted that it does not appear that construction of the District's proposed facilities would remedy this storm sewer problem. The District's Master Plan recommends a system for sanitary sewage collection treatment and disposal only. Three Lakes Master Plan, p. 55. This is consistent with the District's organic legislation. See §32-10-101 et seq., C.R.S. 1973. Interestingly, despite its recognition of storm water runoff as a potentially serious water quality hazard, we have been informed that it is the EPA's policy not to provide grants for combined sanitary and storm sewer systems.

As a result of the foregoing, it would seem extremely important that the County adopt design standards and requirements appropriate and sufficient to prevent the disposal of harmful storm water runoff after its collection. These could include requirements for containment of runoff in settling ponds and for graduated disposal thereof to prevent serious overloading of natural watercourses during runoff periods. Such treatment, when combined with proper drainage and erosion control regulations, will aid in reducing the introduction of storm water-related pollutants into the lakes. Unfortunately, they will not eliminate those sources as efficiently as would proper storm water treatment. The best technique for eliminating such sources, if possible, would be collection and treatment prior to disposal.

f. Design Standards for Mineral Resource Areas.

The County subdivision regulations provide certain design standards for mineral resource areas. §2.8, GCSR. Without resolving the question of whether such are proper and authorized within subdivision regulations, see §30-28-101(10), C.R.S. 1973, it should be noted that such contain no standards concerning water quality. In light of the fact that certain mineral exploration operations are permitted in the F zone, which borders portions of each of the lakes, this is a serious omission. Assuming such regulations are lawful within the subdivision regulations, they should be strengthened by the addition of review requirements and submission requirements pertaining to water quality impacts of mineral exploration.

g. Surface Improvements.

The surface improvement section, §3.1, GCSR, of the subdivision regulations provides certain monumenting, paving, curb and sidewalk standards, and minor landscaping standards. There are several deficiencies in these standards, which are described below.

The street paving requirements of §3.1(2), GCSR, require paving of streets serving development densities of greater than two lots per acre. No other street paving requirements exist in the regulations. See also §2.2, GCSR. While such a regulation may be sufficient from the standpoint of intensity of use, it may neglect certain nonpoint pollution concerns. Thus, if paving streets will diminish pollution potential from storm runoff, it may be profitable for the County to require such in its subdivision regulations. If paving would enhance pollutional loads, it should not be required. Submission requirements and review standards allowing those determinations would be necessary. It would appear that such requirements are authorized. §§30-28-133(3), (4), (6)(c); 29-20-104; 24-65.1-101 et seq., C.R.S. 1973. It should be noted that adoption of such a scheme might require adoption of corresponding regulations to regulate development density encouraged by paving or to regulate density in accordance with the capacity of unpaved streets.

Section 3.1(5) provides certain landscaping requirements. It is feasible to expand this section to require that a subdivider submit a landscaping plan for the review of approving authorities. Such a plan could be aimed at minimizing runoff-related nonpoint sources of water pollution such as sedimentation. Thus, replanting of areas denuded during construction and requirements for maintenance

of natural vegetation and related requirements are suggested as likely design standards. In addition, if development along lakeshores is to be allowed, a restriction against cutting of shoreline trees or other shading vegetation could be required to reduce the potential for the thermal pollution identified by the engineering consultant. See §I.B., supra. Such requirements appear to be within the scope of §30-28-133(3)(b), C.R.S. 1973, as well as §29-20-104, C.R.S. 1973.

h. Utilities.

Section 3.2, GCSR, establishes certain requirements for public sewer and water provisions. In subdivisions of greater density than one lot per acre, public water supply is mandated, while public sewage disposal and treatment are required where density exceeds one lot per two acres. The regulations contain no standards to assure that such systems will not result in growth inducement. Combined with the County Zoning Regulations, which permit densities of as great as 1/6th acre where public water and sewers are available, see §II.A.3.b., supra, this may result in a compounding of development-associated problems which the Three Lakes District's system may create. For example, even if the District were to initially construct a limited disposal and treatment system, the requirements of §3.2 might encourage its rapid growth or the construction of other systems to the extent possible within the Three Lakes District's jurisdiction. In the absence of other needed controls, the result might be rapid aggravation of nonpoint sources. As a result, the impact of this requirement, in the absence of density or other requirements ameliorating nonpoint impacts, should be considered.

i. Procedural and Submission Requirements.

Before any subdivision may be approved by the Board of County Commissioners, it must be reviewed by the Planning Commission and the Board, as well as certain other state and local agencies. §4.1 et seq., GCSR. Their decisions are based upon the information which the subdivider is required to submit at the various stages of review. Id. There are three such stages: the sketch plan, the preliminary plat, and final plat. No subdivision may be constructed nor lots be sold therein until final plat approval has been obtained. §1.8, GCSR. A review of the submission and review requirements discloses certain weaknesses related to the review and control of point and, particularly, nonpoint sources of pollution.

As a general statement, the submission requirements of the subdivision regulations should require all necessary information to determine whether design requirements of the regulations are met. This information should then be judged in accordance with specified review requirements. When the diminution of water quality from point or nonpoint sources is a primary concern and may result from development, the submission and review requirements should reflect such by expressly examining water quality impacts. Unfortunately, Grand County's regulations do not appear to account fully for such impacts.

While the submission requirements of the subdivision regulations, particularly at the preliminary plat stage, do require certain information regarding flooding and sewage disposal, see §§4.2(2)(g), (h), (l), (p), (v), and (w), GCSR, they do not appear to require detailed information on nonpoint source impacts or methods minimizing such. Neither do they require information on the growth-inducing aspects of the provision of sewer or water facilities. For example, using the findings of the engineering consultant as a guide, the following types of requirements might be useful:

1. Information regarding the sedimentation loads created by construction of subdivisions and resulting urbanization.

2. Information regarding other types of pollutants created by urbanization, such as oil and grease from automobiles.

3. Measures proposed to reduce erosion.

4. Measures to reduce sedimentation, oil, grease, or other pollutants.

5. Landscaping measures, including open space buffers.

6. Information regarding the storm water drainage system proposed for the subdivision.

7. Other information to determine water quality impacts of a proposed subdivision.

8. Proof that state and federal water quality permits have been obtained.

This list is not intended to be exclusive. Specific point or nonpoint problems may require other information. Though each of the above categories may not be necessary at each review stage, they should be accounted for at least at one stage, probably the preliminary plat stage. Once again, it

would appear that such requirements are authorized by §§30-28-133(3), (4), (5), and (6); 29-20-104; 24-65.1-101 et seq., C.R.S. 1973.

The review requirements of the subdivision regulations would also benefit from the addition of water quality-related review standards. At present, the regulations establish certain procedures for the review of subdivision plats, but contain no standards to govern the required review. It would be helpful to establish such standards, and to include therein standards requiring a determination by each reviewing body that the subdivision will not increase point or nonpoint sources of pollution in the lakes. The standards would reflect the content of the submission requirements, suggestions for which appear above. Such standards appear to be authorized by §§30-28-133(3), (4), (5), and (6); 29-20-104; and 24-65.1-101 et seq., C.R.S. 1973.

A final suggestion regarding review requirements relates to the distribution requirements of §30-28-136, C.R.S. 1973, as adopted by §4.2(3), GCSR. Those sections mandate referral of the preliminary plat to certain state and local agencies. The Water Quality Control Commission is not one of those enumerated. If the Water Quality Control Commission would consent to review preliminary plats, it might be helpful to add that agency to §4.2(3). While the WQCC is not an agency enumerated by §30-28-136, C.R.S. 1973, this section does not appear to preclude additional review.

j. Design Standards and Review Procedures for Apartment Houses, Condominiums, and Townhouses.

Article V of the subdivision regulations establishes the above-titled special design and procedural requirements. In general, the requirements established by this section parallel those in the generally-applicable sections already discussed, with the exception of certain requirements directly applicable to the special types of development. As a result, most of the same comments apply equally, and these special design requirements will not be given special attention herein.

k. Variances.

Section 8.1, GCSR, provides for variances from the subdivision regulations under the following conditions:

1. When, due to usual site conditions, strict enforcement would result in unnecessary hardship to the

subdivider. Such a variance must not impair the purposes of the regulation or be a detriment to the public good. Conditions may be appended to the grant of a variance. §8.1(1), GCSR.

2. In the case of a plan for an entire neighborhood, community, town, or PUD having a development and building program when, in the judgment of the Planning Commission, the plan provides for adequate open space, traffic, circulation, and service needs when the subdivision is developed. §8.1(2), GCSR.

Certain conditions precedent to the grant of a variance are stated. Id.

Assuming that variances or modifications of the subdivision regulations are lawful -- the enabling legislation does not provide for them -- the County should consider revising the variance section to include:

1. Requirements for the submission of information by the applicant sufficient to demonstrate that the requested variance will neither create nor enhance point or nonpoint source water pollution.

2. Review standards requiring the County Commissioners or Planning Commission to find that the variance will not diminish water quality.

At present, no such standards or requirements exist, though they are arguably encompassed by the requirement of §8.1(1) that no variance be a detriment to the public good.

1. Amendments.

Amendments to the subdivision regulations may be made without consideration of water quality impacts. Considerations similar to those recited with regard to variances should be added to the amendment section.

m. General Considerations.

(1) Regulation of Ongoing Developments.

The Grand County Subdivision Regulations regulate development in order to minimize certain problems and hazards in completed subdivisions. While this is a valid and traditional goal of subdivision regulations, it omits regulation of the serious nonpoint problems associated with the construction phase of ongoing development. Construc-

tion-related sources are identified by the engineering consultant as a major source of nonpoint water pollution. §I.B., supra. As a result, regulations aimed at controlling such impacts must be adopted. It may be possible to insert such regulations into the subdivision regulations or to develop separate regulations applicable to subdivisions and other forms of development. At a minimum, these should include:

1. Erosion control regulations.

2. Sedimentation control regulations.

3. Grading regulations.

4. Regulations governing disturbance of vegetation.

5. Regulations requiring containment of pollutant sources.

Failure to adopt such regulations would frustrate any attempt to strengthen the subdivision regulations since the latter would continue to exempt ongoing development from regulation.

(2) Encouragement of Intensive and Sprawling Land Use Patterns.

While perhaps not having as pronounced an effect on land use patterns as the zoning regulations, the subdivision regulations also appear to contemplate and encourage traditional lot and block land use patterns and thus encourage an intensive and sprawling pattern of land use. This approach is reflected most clearly in the "Streets, Alleys, and Easements" section, §2.2, of the regulations and in the lack of development density or improvement location requirements in the regulations. Taken in conjunction with the minimum lot sizes established by the zoning regulations, it would appear that a sprawling form of development is contemplated. This will result, of course, in an enhancement of nonpoint sources beyond those which might be contributed in other forms of development, which utilize more flexible density requirements and which may regulate location within certain zones.

(3) Absence of Water Quality-Related Standards.

The absence of submission requirements and review standards within the regulations has been outlined above, and there is no need to repeat them here. As a general comment, however, it can be noted that the absence of these

creates a serious weakness in the regulations which must be remedied. In short, one purpose of the regulations should be the protection and enhancement of water quality.

5. Individual Sewage Disposal Regulations.

The Grand County Board of Health, pursuant to §25-10-101 et seq., C.R.S. 1973, has adopted rules and regulations governing the construction, installation, and cleaning of individual sewage disposal systems. Their purpose is to preserve the environment, protect the public health, eliminate and control causes of disease and infection, and to reduce and control the pollution of air, land, and water. Art. I, §1, Grand County Individual Sewage Disposal Regulations (ISDR). To accomplish these purposes, the regulations prescribe minimum standards for the construction, location, operation, and maintenance of such systems, which cover the various types of individual systems, Art. III, ISDR, and require that any person wishing to install such a system obtain a permit. Art. IV, ISDR. Standards for the licensing of system installers and cleaners are also provided. Art. V, ISDR.

A review of the County's regulations reveals that they conform closely to the guidelines, rules, and regulations of the Colorado Department of Health and are therefore generally adequate to control the water quality impacts resulting from the installation of individual disposal systems in the three lakes region. These provisions are or could be enhanced by existing and suggested provisions of the zoning and subdivision regulations. See §II.A.3., 4., supra.

6. Planned Unit Development Regulations.

Grand County has adopted a Planned Unit Development Regulation (PUD regulation) permitting "planned unit development" as a special use within a zoning district. Several sections of the regulation appear to require strengthening with regard to water quality concerns.

Applying the concepts discussed with relation to zoning and subdivision is somewhat more difficult with relation to PUD's. Zoning and subdivision are forms of regulation applicable to most types of developments, including PUD's, each of which should have as one basic focus the protection of the natural environment. PUD regulations are intended to provide a flexible alternative to traditional land use regulation by permitting innovative and unique developmental designs. They do not provide generally applicable standards governing all development. As a result, PUD regulations are not generally thought of as having the purpose of protecting the environment. They should, however, have that result, or

the advantages of the PUD style could be sacrificed. With this objective in mind, the Grand County PUD Regulation was reviewed.

a. General Provisions.

The PUD regulation establishes several general provisions for PUD's. These include the purposes of the regulation, a requirement of consistency with the Master Plan, the PUD regulation's relationship to the subdivision regulations, the general intent of PUD approval, phasing, and staging of PUD construction and definitions. Art. I, §I-VIII. In none of the general considerations is it indicated that it is the purpose or intent of the PUD regulation to require and encourage development which will have no detrimental effect upon water quality or other natural features. It would seem that such should at least constitute a purpose of any PUD. The innovative designs allowed by the regulation cannot be comprehended to permit degradation of water quality.

The PUD general provisions, by stating that any PUD must be consistent with the County Comprehensive Plan, as required by §24-67-104(1)(f), C.R.S. 1973, provide another reason for revising the plan to encompass goals and objectives relating to the preservation of water quality.

b. Procedures and Submission Requirements.

Article II of the PUD regulation provides procedures and submission requirements to be met by the County and a developer of any PUD. Certain additions or changes thereto can be suggested.

(1) Submission and Review Requirements.

While perhaps more comprehensive and effective than the submission and review requirements of the subdivision regulations for protecting water quality, the PUD requirements need strengthening. PUD submission requirements are found at each stage of PUD review, the preapplication conference, the schematic plan stage, and the final plan stage. At various points in these stages, information as to solid waste disposal, sewage, groundwater, landscaping, effects of runoff, and soil quality is required. See Art. II, §§II.A.7, II.B.5, II.C.3, III.B.15, IV.C.1.(g). If detailed information is required under these sections, the impacts of such important nonpoint sources as sedimentation, erosion, and other construction-related sources can be determined.

Unfortunately, the ordinance provides extremely weak standards, if any, by which to review the required information.

No review standards for information submitted at the preapplication conference or the schematic stage exist. At the final plat stage the following apply:

1. The final plan must substantially comply with the schematic plan.

2. The final plan must comply with all other standards for review not considered at the schematic stage.

These review standards should be amended to require at each review stage findings by the approving bodies that the proposed PUD will contribute no erosion, sedimentation, or other point and nonpoint sources to the lakes or tributaries thereto. In addition, more specific review standards relating to the information required by the submission requirements could be added. For example, a finding that any landscaping or vegetation plan aid in preserving or enhancing water quality by diminishing nonpoint sources may be included. Requirements such as these will assure that the information to be gained from good submission requirements will be fully reviewed with regard to each PUD. Such standards are clearly within the contemplation of the enabling legislation. See §24-67-105(1), C.R.S. 1973.

(2) Referral Requirements.

In addition to the referral requirements of the subdivision regulations, which would appear to apply to a PUD subdivision, see §V.D., PUDR, the PUD regulations require referral of the schematic plat to at least seven other state and federal agencies, including the Colorado Water Pollution Control Commission. This list is a good one which should serve as a model for the County's subdivision regulations.

(3) PUD As Special Review Use.

PUD's are special review uses in each zoning district. Application for such a permit must be made at the schematic stage. §IV.D., PUDR. Standards for the review of an application for such a permit, including those related to water quality concerns, should be included within the zoning regulations, as described in §II.A.3.d., supra.

c. Minor Modifications and Amendments.

The PUD regulations permit minor modifications in the height, size, and location of buildings, if required by

engineering or other circumstances not foreseen at the time of final PUD plan approval, so long as the modification violates no standard or regulation established by the zoning and subdivision regulations. §IX.A., PUDR. The regulations also authorize amendment of the final PUD plan to include uses not authorized in the plan but allowable within the zoning district in which the PUD is to be located. §IX.B., PUDR. No water quality or other standards exist to determine whether such "minor" modifications could create hazards to public health or safety. This could result in major hazards to water quality, particularly where building size or location or types of use are changed without further review. This potential weakness should be remedied by:

1. Establishing standards defining what constitutes a "minor modification" under §IX.A. For example, the regulation might provide that changes of some small percentage of building size, height, or location are minor and not subject to review. Other changes would need to be reviewed by normal PUD review procedures. Such standards are typical in most PUD regulations. See State Model PUD Regulation, Colorado Department of Local Affairs.

2. Establishing certain review standards and submission requirements which would prohibit even "minor modifications" if such would result in a degradation of the lakes' water quality.

3. Establishing certain review standards and submission requirements for amendments to PUD uses requiring the prohibition of those which could result in diminution of the lakes' water quality. It should be noted that any such amendments would seem to violate the special use provisions of the zoning regulations. A PUD must be approved as a special review use and, when it is, the uses allowable within the PUD are approved. To allow later the addition of other uses without resort to special review procedures constitutes an amendment of the special use permit in absence of established special review procedures. See §XI, GCZR. This would be particularly true if the PUD amendment section were read to allow those uses subject to special review in a zoning district to be added to the PUD uses without notice and a hearing before the County Commissioners in accordance with special review requirements. See Art. III, §1, PUDR.

It should also be noted that minor modifications and amendments are not expressly authorized by the enabling

legislation. §24-67-101 et seq., C.R.S. 1973. If such a procedure is to be employed, it should be subject to strict limits such as those suggested above.

d. Specific Uses and Requirements.

(1) Common Open Space.

Article III, §II-A, of the PUD regulation requires that a minimum of 25% of total PUD area constitute common open space. Use of open space as a buffer to protect against nonpoint sources has been discussed above. See §II.A.4.d., supra. The same concepts would apply here. There appears to be no restriction in the PUD enabling legislation which would prohibit location of open spaces to aid in achieving water quality goals so long as the welfare of the residents of the PUD will be served. See §24-67-101, C.R.S. 1973.

e. General Considerations Regarding PUD Regulation.

(1) Regulation of Ongoing Development.

Like the County Subdivision Regulations, see §II.A.4. e.(1), supra, the PUD regulations regulate PUD's only from the perspective of ameliorating hazards, including water quality hazards, which might result from development of a PUD. They do not attempt to regulate the serious nonpoint sources which may arise during the construction phase. Such sources should be controlled either under the subdivision regulations which are generally applicable to PUD's in Grand County, see Art. II, §V.D.; see also §24-67-107(4), C.R.S. 1973, the PUD regulation itself, or independent regulations applicable to all County development. Reference should be made to §II.A.4., supra, regarding suggested types of regulations needed to control such sources. The validity of such regulations would seem clear under §§30-28-133, 29-20-104, 24-67-101 et seq., C.R.S. 1973.

(2) Absence of Review Standards.

The absence of water quality-related review standards, and of review standards generally, in the PUD regulation is a serious weakness discussed above. Since this potential problem has been discussed, it will not be repeated here except to note that the absence of such standards may result in serious problems in the implementation of the regulation. Review standards at each stage of PUD review should be added.

7. Building Codes.

Grand County has adopted the Uniform Building Code, 1973 (UBC), of the International Conference of Building Officials. Though building codes traditionally, and functionally, have been designed to regulate the manner of construction of buildings and structures only, leaving other regulatory devices to concern themselves with necessary changes in the land itself, the UBC does contain certain provisions which relate to land alteration, and which therefore affect nonpoint source regulation. A liberal reading of the building code enabling legislation probably justifies the inclusion of such provisions in the building code. §30-28-201, 203, C.R.S. 1973; see also §29-20-104, C.R.S. 1973. These provisions have, therefore, been reviewed.

Grand County has also adopted the Uniform Mechanical Code, 1973, the Uniform Code for the Abatement of Dangerous Buildings, 1973, and the Uniform Fire Code, 1973. These contain no provisions relevant to this study.

a. Detailed Regulations -- Excavations, Foundations, and Retaining Walls.

Chapter 29 of the UBC contains certain excavation and fill regulations. These regulations prohibit unsafe excavations and fills, establish standards for the slope of excavations, and restrict certain excavations due to soil instability. §§2903, 2904, UBC. While such regulations may have water quality implications, for example in preventing erosion, it is clear that their focus is upon building safety rather than water quality. No water quality considerations appear in Chapter 29. While it may be that the enabling legislation cited above would permit such to be included, it would seem that such considerations more properly belong within the subdivision ordinance or an independent grading or erosion control ordinance. Such are proposed in §III., infra.

b. Excavation and Grading.

Chapter 70 of the UBC contains certain excavation and grading requirements. The chapter requires that no person shall do any grading, with certain exceptions, unless a permit is first obtained therefor. §7003, UBC. A permit may be obtained only if the building official approves certain plans, specifications, soil reports, and geological reports. §7004, UBC. The code also contains certain standards regarding each of the following:

1. Cuts. §7009, UBC.
2. Fills. Id., §7010.

3. Setbacks of cut and fill slopes. Id., §7001.
4. Draining and Terracing. Id., §7012.
5. Erosion Control. Id., §7013.
6. Grading Inspection. Id., §7014.
7. Work Completion. Id., §7015.

If the County intends these regulations to serve as its primary grading regulations, certain additions would need to be made since it is clear that the thrust of the regulations is the protection of building safety rather than water quality. Thus, though the existing regulations could aid in maintaining water quality by helping to minimize erosion- and sedimentation-related sources, in their current form the regulations contain no standards expressly related to the maintenance of such. Submission requirements and review standards pertaining to alleviation of nonpoint sources resulting from grading would need to be added to strengthen the code. Also, regulations concerning minimization of the water quality impacts of ongoing grading would need to be included, the regulations now directed to achieving a properly graded area as an end result only.

If the County intends the existing grading regulations to serve as a means of assuring that all grading results in areas upon which buildings can be safely constructed, then grading regulations controlling the water quality impacts of that activity must be adopted. These could be a part of subdivision regulations or independent regulations. In view of the traditional function of building codes, it would seem wise to include such regulations in a format other than the building code.

c. Board of Appeals.

Section 30-28-106, C.R.S. 1973, of the County enabling legislation authorizes the County to create a board of review which may be vested with each of the following powers:

1. Subject to appropriate principles, rules, standards, conditions, and safeguards, to grant special exceptions to the code in harmony with its purpose and intent.

2. To suggest amendments to the code.

3. To adopt substantive rules and regulations based on the provisions of the building code.

The County, by virtue of its adoption of the UBC, has appointed a Board of Appeals, also known as a Board of Review. §204, UBC; Grand County Res. No. 1974-6-10. The code authorizes the Board to determine the suitability of

alternate materials and methods of construction and to provide for reasonable interpretations of the code. §204, UBC. Arguably, this authorization is broad enough to permit the Board of Appeals to perform items No. 1 and 3 at the minimum. (Section 30-28-206(2) appears to authorize counties to grant all or any part of the above powers to the Board of Review. Mere creation thereof does not appear to vest it automatically with all powers listed in that section.) Neither the UBC nor Resolution No. 1974-6-10 appears to establish standards for the grant of special exceptions or the adoption of substantive rules. In particular, no water quality-related standards exist. If it is the intent of Grand County that its building code Board of Review may grant variances and make substantive rules, the following additions to the building code are advisable:

1. Inclusion of submission requirements and review standards to govern the grant of special exceptions to the code. These should include standards, conditions, rules, principles, and safeguards which assure that no special exception will create any added water quality hazard to the lakes.

2. Drafting of substantive rules and regulations based upon the building code which will assure that the code is interpreted, to the extent possible, consistent with the preservation of the lakes' water quality. For example, in addition to any other grading regulations which might be adopted by the County, the excavation requirements of Chapter 70 could be supplemented by rules to assure that no grading and excavation will create point or nonpoint source water quality impacts.

Such additions to the code would appear to be authorized by §30-28-201 et seq., C.R.S. 1973, itself, as well as by other enabling legislation. §29-20-104, C.R.S. 1973. Such an approach would also assure that grading, excavation, grants of special exceptions, and other activities under the code would be consistent with water quality goals while leaving primary regulation of land-disturbing activities to regulations more suitable to their control.

8. Potential New Regulations for Regulation of Development Activities Creating Water Quality Impacts.

The preceding sections regarding the various Grand County "land use" regulations have attempted to define potential water quality-related weaknesses in the existing County ordinances and to offer suggestions for their improve-

ment. Certain water quality impacts of land development might better be regulated through the adoption of new regulations or the substantial amendment of existing ones. It is the purpose of this section to identify new regulations which should be considered for adoption by the County. Since these regulations may apply equally to other entities under study herein, particularly the Town of Grand Lake, they will be described in detail in a subsequent segment of this report. See §III., infra. Perceived authority for such regulation will also be identified therein. Finally, conceptual model regulations will be proposed for certain of the identified regulations in that section.

By proposing the numerous regulations described in this section, it is not intended to imply that the County must adopt each one in order to protect the water quality of the lakes. Rather, these are suggested as examples of potential regulatory devices, certain of which may accomplish similar goals.

Finally, each of the suggested regulations is identified as an independent regulatory mechanism. As noted above, certain of them might more appropriately be included as amendments to existing regulations. The County should read the proposed regulations in that context. By combining regulations to the greatest extent possible, the burden of permit review upon the County and applicant is reduced.

a. Regulations Suggested for Adoption.

(1) Regulation on the Basis of Water Quality Impact.

(a) Impact Analysis Regulations.

(b) Impact Zoning.

(2) Floating Zone.

(3) Erosion Control Regulations.

(4) Grading Regulations.

(5) Drainage Regulations.

(6) H.B. 1041 Regulations pertaining to:

(a) Site selection and construction of major new domestic water and sewage treatment systems and major extensions of existing domestic water and sewage treatment systems;

(b) Site selection and development of solid waste disposal sites;

(c) Site selection and development of new communities;

(d) Mineral resource areas;

(e) Natural hazard areas;

(f) Historical, natural, and archaeological resource areas of statewide importance.

(7) Shoreline Protection Regulations.

(8) Campground and Recreation Area Regulations.

(9) Litter Control Regulations.

(10) Regulation of Existing Development (see §c., infra):

(a) Building Permit Regulations.

(b) Nonconforming Use Regulation.

(c) Nuisance Regulation.

(d) H.B. 1041 Regulation.

(e) H.B. 1034 Regulation.

b. Regulations Which Might Be Considered for Further Study.

(1) Development Timing Regulations.

(2) Utility Extension Regulations.

(3) Acquisition of Land or Land Uses to Preserve Open Spaces.

(4) Transferable Development Rights.

B. Town of Grand Lake.

Because of its location on the shoreline of Grand Lake, development in the Town of Grand Lake could pose a significant hazard to the water quality of the lakes, and particularly Grand Lake. Since the Town is within the boundaries of the District, implementation of the planned collection and treatment system could result in increased growth rates

within the Town or within areas currently part of Grand County which the Town might annex in the future. A review of the land use regulations of the Town must therefore be included in this study. In addition, because existing urban development in the Town already contributes nonpoint sources of water pollution, methods of controlling such sources take on an added importance.

The Town of Grand Lake has not adopted as comprehensive a regulatory scheme as has Grand County. Its only land use-related ordinances are the following:

1. Zoning Ordinance (includes PUD's).

2. Building Code.

3. Nuisance Ordinance.

We have been informed by the office of the Town Clerk that the Town has not adopted the following common types of plans and ordinances:

1. Master Plan.

2. Subdivision Ordinance.

3. Individual Sewage Disposal System Ordinance.

The results of the review of the existing ordinances are outlined below.

1. Conclusion.

Certain existing local regulations need improvement in varying degrees to protect water quality from potential nonpoint sources. Also, there is a serious need for certain new regulations which do not currently exist.

2. Zoning Ordinance.

a. Purpose and Scope.

The zoning resolution recites as its purposes all those matters enumerated in §31-23-303, C.R.S. 1973; §5, Grand Lake Zoning Ordinance (GLZO). To accomplish those purposes, the ordinance prohibits uses of buildings or land which are inconsistent with its requirements. §7.B., GLZO.

Though the zoning ordinance adopts each of the purposes expressly established by the zoning enabling legislation for municipalities, the purpose section should be expanded to include as a purpose the prevention of pollution of the

lakes by point and nonpoint sources. Such a purpose is within the contemplation of current enabling legislation. §§31-23-301, 302, 303; 29-20-401; 24-65.1-101 et seq., C.R.S. 1973. Inclusion of such as a purpose would be of particular value in justifying zoning actions taken to protect or enhance the water quality of the lakes.

b. Zoning Districts.

Section 7 of the zoning ordinance lists thirteen zoning districts. Eight of these are of a residential nature, two are commercial, two industrial, and one is open.

(1) Open District.

Certain agricultural (excluding feedlots or animal sale barns), residential, and public and quasi-public facility and building uses are permitted as of right in the O district. §8.A., GLZO. By conditional use permit, hospitals, sanitaria, certain public utilities and facilities, and parking lots are allowed. §8.B. 1-6, GLZO. The ordinance provides certain standards for review of those conditional uses, the applicability of which is unclear. Those standards may apply either to parking lots only or to each conditional use listed above. The confusion lies in the fact that the standards are codified under the parking lot use only, that being the last enumerated conditional use, as §8.B.6.a., b., GLZO. That format would indicate that they are meant to apply only to parking lots. Logic, however, would dictate that their application is equally necessary for the review of all the conditional uses listed. The terms of the ordinance would also indicate such. For example, water reservoirs and similar uses are conditional in each zoning district. If the conditional use standards of the ordinance were interpreted to apply only to the last enumerated conditional use, as could be argued on the face of the ordinance, reservoirs and similar uses would be subject to those standards in eleven zones, but not in two, simply because in those two, those uses are not the last ones enumerated. See §§8.B., 20.B. There is no justification for such inconsistent treatment of those uses. It should be noted that the Town Attorney for Grand Lake has informally opined that the standards are intended to apply to all conditional uses.

Regardless of what may be the scope of their applicability, the conditional use standards require the submission of certain information by the applicant. An application for a conditional use must be accompanied by development plans showing the proposed use of the property and its relationship to adjacent properties. The plan must also identify:

1. Existing contours at two-foot intervals.

2. Location of improvements on the site.

3. Height and bulk of proposed structures.

4. Placement and description of screening and screen planting.

5. Availability of utilities.

6. Time sequence of development.

7. Environmental impacts on properties in the immediate vicinity.

The Planning Commission may require additional conditions regarding use intensity, appearance, hours of operation, setbacks, open spaces, or other conditions.

Airports are also allowed by conditional use. Review of an application is subject only to the condition that the facility does not endanger the immediate area and meets all state, local, and federal regulations. §8.B.7., GLZO.

The final activities allowed by conditional use are rock crushing, concrete and asphalt manufacture, sand and gravel and other excavation or surface mining. §8.B.8., GLZO. Detailed requirements relating to site planning, dust control, and site restoration are provided.

Minimum lot size is one acre for dwellings, one-half acre for other permitted uses, and one acre for conditional uses. Setbacks are provided.

(2) Residential Districts.

There are seven residential districts included in the zoning ordinance permitting various single- and multiple-family uses. §9-15, GLZO. Lot sizes in those districts range from one acre to approximately one-sixth of an acre (7,000 sq. ft.). Home occupations, keeping of domestic animals (although kennels are disallowed) and farm animals (on a parcel of land of at least one acre), fences, and accessory buildings are also permitted uses. By conditional use, certain public utilities and public buildings, reservoirs, water storage tanks and pumping stations, and sewer lift stations are allowed, subject to the same review requirements as those uses listed in §8.B. 1-6, GLZO. A similar question arises with relation to each residential district, namely, whether these review standards apply to all or only the last of the enumerated conditional uses,

these being reservoirs and similar uses. Lot sizes for conditional uses are the same as for permitted uses unless the Planning Commission specifies otherwise. Setback requirements are provided.

Upon approval of a development plan, minimum lot size, yard, and width requirements may be waived to accommodate a PUD approach incorporating a variety of housing types, but not a variety of uses. In no case may density exceed one unit per acre, however, on a minimum developed area of five acres. The density approach must be approved by the Planning Commission and Board of Trustees.

(3) Mobile Home District.

Mobile homes designed for single-family occupancy, home occupations, and the keeping of domestic animals, but not kennels, fences, and accessory buildings, are allowed as of right in the mobile home district. §16.A., GLZO. The same conditional uses are allowed as those authorized in the residential districts, subject to the same scope of review (again with the question of whether the review standards are applicable to all or only the last enumerated conditional uses, see §16.B. 1-3, GLZO). Minimum lot area is 5,000 square feet for all uses. Setback requirements are established.

The mobile home zone is a floating zone, created by an application for rezoning. §16.E., GLZO. Such an application for rezoning must be accompanied by a detailed site design which includes drainage and sewage disposal information. No mobile home zone of under five acres may be approved. §16.D.2.c., GLZO.

(4) Commercial Districts.

There are two commercial districts -- the commercial transitional and commercial district. The commercial transitional district permits certain "light" commercial uses, such as offices, medical clinics, pharmacies, barber shops, nonprofit clubs, day-care centers, community service agencies, and parking lots. §17.A., GLZO. Similar businesses no more offensive or detrimental to welfare than those listed as permitted uses, certain public facilities and buildings, reservoirs, water storage tanks and pumping stations, and sewer lift stations are permitted by conditional use permits. §17.B., GLZO. The commercial district permits all uses enumerated in the commercial transitional district, all retail and service businesses, wholesaling if storage space does not exceed 1,500 square feet, fabrication incidental to retail sales, mortuaries, and accessory buildings. The provisions for conditional uses are identical to

the commercial transitional district and the question of the scope of the applicability of the review standards arises in relation to both districts. See §17.B. 1-3, 18.B. 1-3, GLZO. No setback or lot size requirements, with the exception of a minimum front yard requirement of 25 feet for uses having fuel pumps, exist in either zone, though each limits building height to 28 feet.

(5) Industrial Districts.

A light industrial and general industrial zone are included in the Grand Lake Zoning Ordinance. The IL district permits all uses allowed in the C district, with the exception of residential uses, as well as manufacturing operations, builder supply yards, storage of oil, gasoline, or petroleum, and accessory buildings. §19.A., GLZO. The manufacturing uses must be operated within a structure which is at least partially enclosed, and all dust, fumes, odors, refuse matter, smoke, vapor, noise, light, and vibration must be confined to the IL district. §19.A.2., GLZO. Parking and travel areas must also be dust free. Id. In the general or IG district, certain research and manufacturing uses, industrial or manufacturing uses, and accessory buildings are allowed by right. §20.A., GLZO. The industrial and manufacturing uses may be carried on within or without a building enclosure so long as unusual amounts of dust, fumes, odors, smoke, vapor, noise, lights, and vibration are confined to the IG district and outdoor storage areas are concealed from view. §20.A.2.a., b., GLZO. Conditional use provisions identical to the residential and commercial districts are included, with the addition of enclosed junkyards in the IG district. §19.B., 20.B., GLZO. Again, the applicability of the review standards is uncertain. No minimum lot size or setback requirements except those which the Planning Commission may set are established. Building height may not exceed 28 feet. §19.C., 20.C., GLZO.

All permitted and conditional uses in both the IG and IL districts are subject to comprehensive performance standards. These standards prohibit any industrial uses causing "water pollution or offensive noise, vibration, dust, odors, heat, glare, or other objectionable influences beyond the property in which the use is located." §19.E., 20.E., GLZO. No use may create a public nuisance or hazard. Id. With regard to water pollution effects, potential hazards must be minimized by the installation of safeguards acceptable to the building inspector, the Colorado Health Department, the local health department, and in compliance with federal laws. §19.E.7., 20.E.7., GLZO. Percolation and groundwater tests may be required prior to operation of facilities. Id. Outdoor storage must be carried out in a manner which will

prevent stored materials from carriage by natural forces and in a manner complying with state and federal laws. §19.E.6., 20.E.6., GLZO. Landscaping, buffer, and setback requirements may be designated by the Planning Commission. §19.F., 20.F., GLZO.

c. General Considerations Re: Zoning Districts.

(1) Potential for Sprawling Land Use.

A minimum lot size of at least one acre is established in the open, residential, and mobile home zones -- nine of the thirteen existing zones. This is reduced from 2,000 to 5,000 square feet in certain residential zones and the mobile home zone, respectively. No minimum lot sizes are established in the commercial or industrial sections. Within those zones, uses ranging from single- to multiple-family housing are permitted as of right, including mobile home housing. As a general rule, regulations of the sort which are described above lead to an intensive lot and block pattern of development since the regulations define the intended characteristics of a development by lot rather than by establishing density requirements for the development as a whole. This kind of land use, which is readily facilitated by construction of a centralized sewage system, creates an intense, urbanized environment which, in the absence of other controls, will contribute urban- and construction-related sources to a more significant degree than other less intense forms of land use.

It is possible, under the existing ordinance, to avoid intense lot and block development to some degree. Each of the residential districts contains a "density" provision which preserves the one-dwelling-unit-per-acre standard while allowing for a waiver of the lot size and setback requirements of the district. This permits clustering of development and the provision of open areas as opposed to intense lot and block development. Open areas and careful design to reduce the amount of roads or other paved areas could serve to minimize nonpoint impacts in particular. In addition, open areas might be selectively placed to provide open space buffer zones. There are, however, problems with this approach.

1. The ordinance in no way encourages developers to operate under the density requirements. Since approval of a design under the density provision is not automatic, while establishment of lot and block development is a use by right, this may discourage developers from using the former

method. Alternatively, the potential market advantages of an innovative design may encourage its use despite the added review requirements.

2. The density provision may be unlawful. The provision states that it is ". . . specifically designed to accommodate a Planned Unit Development approach . . ." PUD's are authorized by §24-67-104, C.R.S. 1973. That section and other sections of the "Planned Unit Development Act of 1972," §24-67-101 et seq., C.R.S. 1973, establish specific standards for PUD ordinances, most of which are not met by the "density" provision. The provision may therefore be unlawful. Since the zoning ordinance was adopted in February, 1974, the provision fails to benefit from the grandfather clause of that act. §24-67-107(2), C.R.S. 1973. Adoption of an actual PUD resolution may be necessary.

3. Even if lawful, the section might require certain additions. Approval of any PUD should be preceded by submission of all information necessary to show that no point or nonpoint sources of water pollution will result from the development. Review standards for the PUD application should require such a finding. Neither of those requirements is specifically spelled out in the section, and these additions should be made.

(2) Lack of Water Quality-Related Siting Standards.

Only in the mobile home and industrial districts are the permitted uses subject to any review to determine water quality impacts of the permitted uses. §16.E., 19.E., 20.E., GLZO. This is an omission which should be corrected by the institution of one or more changes in the ordinance. Reference should be made to §II.A.3.c.(2), supra, for the kinds of additions which might prove useful to regulation of water quality impacts of development. A review of municipal enabling legislation indicates that the kinds of regulations suggested therein for county adoption would be permissible for municipalities as well. Sections 31-23-301(1), 31-23-302, 31-23-303, 29-20-104, and 24-65.1-101 et seq., C.R.S. 1973, all appear to provide authority therefor. The value of any particular suggestion must be measured by the specific characteristics of the Town of Grand Lake.

(3) Conditional Use Standards.

(a) Submission and Review Standards.

Specific conditional use standards are found in relation to the conditional uses in each zone. Generally applicable conditional use standards, found in §22.B., are discussed in §II.B.2.d.(2), *infra*.

Submission requirements and standards for the review of conditional uses are necessary for implementation of a conditional use scheme. The applicability of the specific conditional use standards of the zoning ordinance is uncertain. This uncertainty should be eliminated by clearly expanding the review requirements to include all conditional uses enumerated in each district.

In addition to expanding the review standards to include all uses, the standards themselves should be strengthened to assure closer review of water quality impacts. Submission requirements covering the following should be considered:

1. A requirement that all point and nonpoint sources be eliminated or minimized.

2. A requirement that an erosion control plan be submitted.

3. A requirement that a drainage plan be submitted.

4. A requirement that a sedimentation control plan be submitted.

5. A requirement that a landscape or vegetation plan be submitted.

6. A requirement that evidence of compliance with all state and federal water pollution laws be provided.

In addition to submission requirements, specific review standards for the decision on a conditional use application which requires a finding that the proposed use will create no point or nonpoint sources of water pollution should be added to the ordinance.

The consultant is aware that the specific conditional use requirement in the above-discussed sections currently requires that an applicant submit a statement of environmental impact on properties in the immediate vicinity of the

proposed use. Because the impact of nonpoint water pollution sources has traditionally been ignored in land use decisions, and because the requirement is limited to properties in the immediate area and may not include impacts upon the lake, it would appear that the specific standards proposed above would be more effective.

The foregoing discussion related to the conditional use review requirements found in each of the zoning district sections. In §8.B.8, GLZO, rock crushers, concrete and asphalt plants, sand and gravel pits, and other excavations and surface mining are allowed by conditional use permit. Unique review standards are provided for these uses. While these standards are generally good, requiring, for example, site reclamation, they too should include specific provisions to ameliorate point and nonpoint sources from such operations. Examples would include requirements for protecting vegetation, containing sediment, containing water produced in the operations, erosion control plans, and similar provisions. The same should apply to the conditional review requirements applicable to airports, which are now extremely sparce. §8.B.7., GLZO.

(b) Expansion of Scope of Conditional Use.

In certain instances expansion of the conditional use provisions to include certain potentially hazardous uses might be considered. Parking areas, for example, are permitted as of right as expressly enumerated or as accessory uses in the commercial and multi-family residential districts. Gasoline stations or marinas are likewise permitted as of right within the C district. Storage areas for certain C or CT uses may also be permitted as of right. Each of these uses possesses significant nonpoint water pollution potential. As a result, these uses and any which may have similar pollution potential should be considered for inclusion as conditional uses within zones in which they are necessary. See §8.B.6., GLZO, for example, which already includes parking areas as conditional uses. Expansion of the conditional use concept will afford Grand Lake a better mechanism for preventing water quality impacts of certain hazardous uses.

(c) Uses Hazardous Per Se.

Certain uses, even if established under strengthened special review requirements, might still present a hazard to water quality. A review of the zoning regulations indicates that certain uses permitted by special review in the O district, such as commercial parking lots, airports, sand and gravel operations, and surface mining, particularly might

create water quality hazards if located near a lake or a tributary stream. If data is available to confirm this suspicion, the County might be advised to severely restrict or prohibit such uses in certain areas. This might be accomplished through:

1. Zoning;

2. Floodplain regulations, whether part of zoning or otherwise;

3. Shoreline regulations, whether part of zoning or otherwise.

With respect to floodplain and shoreline regulations, H.B. 1041 might be of some assistance. See §24-65.1-101 et seq., C.R.S. 1973. Regulations under this statute will be discussed more fully in §III., infra.

(d) Authority.

Conditional use regulation based upon water quality impacts would appear to be permitted by several sections of the municipal enabling legislation, which recognizes the validity of controlling land use based upon the environmental impacts thereof. §§31-23-301, 302, 303; 29-20-104; 24-65.1-101 et seq., C.R.S. 1973.

(4) Mobile Home Floating Zone.

The mobile home district is not delineated on the zoning map and may be created by petition for amendment. §16.E., GLZO. An applicant must submit certain information to obtain the zone change. The floating zone is an excellent concept for location of the mobile home zone, which should be retained. Certain additions can be suggested:

1. Addition of specific submission requirements which would request detailed information regarding landscaping, erosion control, sedimentation control, and waste disposal information. In addition, the drainage information already requested by §16.E.6., GLZO, should be made more specific. Sewage disposal information is also included in §16.E.10., 15., GLZO. Evidence that all state and federal water pollution control permits have been obtained should be added.

2. Addition of review standards which would prohibit approval of the zoning change if point or nonpoint sources are not ameliorated.

(5) Industrial District Performance Standards.

Both the light and general industrial district regulations contain performance standards which are applicable to permitted and conditional uses within the districts. The requirements are quite comprehensive generally and require information regarding matters specifically related to water quality as well. Only a few recommendations need be offered:

(a) Water Pollution References.

The performance standards prohibit the emission of water pollution from any manufacturing or other processing in the IL or IG districts and require proper safeguards where hazards may exist. §19.E.7., 20.E.7., GLZO. Revision of this section to include the following should be considered:

1. The term "water pollution" should be clarified to expressly include point and nonpoint sources.

2. In connection with No. 1, specific requirements relating to water quality hazards pertaining to erosion, sedimentation, runoff from storage or work areas, waste disposal, and sewage disposal should be included.

3. Sections 19.E.7. and 20.E.7., GLZO, should be expanded to prohibit pollution from all uses in the IG and IL zones rather than from manufacturing and other forms of processing only, as is now the case. Even such "light" uses as lumber yards or gasoline storage, §19.A., GLZO, can create serious hazards to water quality. Such expansion would also conform §§19.E.7. and 20.E.7., GLZO, to the general provisions of 19.E. and 20.E., GLZO, which prohibit water pollution from all industrial or commercial uses.

(b) General Standard.

As mentioned in (i), supra, a general provision prohibits all water pollution which might be caused by any use in the IL or IG districts. §§19.E., 20.E., GLZO. This also prohibits all such uses from creating offensive noise, vibration, heat, smoke, dust, glare, or other objectionable uses beyond the boundaries of the property in which the uses are located in a manner which will create a public nuisance or hazard. Presumably, such offensive influences which do not extend beyond the property in a way which creates a

public nuisance would be permitted if all other requirements were met. This section should be clarified to prevent all such objectionable influences whether creating a public nuisance or not. That term is imprecise, generally requires judicial definition, and may not encompass harmful water quality impacts which may not constitute "nuisances" as a matter of law.

(c) Outdoor Storage and Waste Disposal.

Sections 19.E.6. and 20.E.6. provide standards for outdoor storage and waste disposal. These are generally good, containing such requirements, for example, as a prohibition against storing materials in a fashion which would permit carriage by floodwaters. Minor additions, including the following, may be recommended:

1. Specific standards regarding the water quality impacts of waste disposal should be included. These might include requirements that storage be accomplished in a fashion which will not create nonpoint sources in particular. For example, care to assure that leakage of stored oil or gas does not occur might be important. As currently drafted, the storage regulations seek to avoid hazards such as explosion only, rather than to prevent the degradation of water quality.

2. Specific standards regarding regulation of on-site waste disposal at IL or IG uses should be included.

(d) Uses by Right in IG District.

An industrial or manufacturing use in the IG district is subject to a prohibition against emission of unusual amounts of dust, fumes, odors, smoke, vapor, noise, lights, and vibration beyond the boundaries of the IG district. This prohibition is in addition to the general standard discussed in §(ii), supra, which prohibits any such emanations To control water quality better and to conform to the general standard, that section should be amended to delete the term "unusual amounts" and the qualifying statement "shall be confined within the IG district." Certain permitted uses in the IL district are subject to a similar standard and similar changes should be made.

(e) Application to Commercial and Other Uses.

The performance standards in the IL and IG districts apply to each use enumerated therein. In the IL district,

this means that those standards apply to the C district uses, which are swept into the IL district, see §19.A.1., GLZO, when implemented in the IL district. Interestingly, those same standards do not apply to those commercial uses when located in a C district itself. Because many C district uses (such as gasoline stations) could create storage, waste disposal, sedimentation, and other nonpoint-related sources, it would seem logical to expand the standards to certain permitted and conditional C district uses at least. Indeed, development of performance standards suited to each district is an alternative for controlling water quality impacts of development. See also the Mobile Home Floating Zone District, §16, GLZO. Such would be no more than a form of impact zoning, expressly authorized under §29-20-104, C.R.S. 1973, and implied within other statutes as well. At a minimum, the standards should be imposed on C district uses. Their applicability thereto has already been recognized.

(6) Authority.

It would appear that the comprehensive suggestions made with regard to the industrial performance standards are justified and authorized by §§31-23-301, 302, 303; 29-20-104, and 24-65.1-101 et seq., C.R.S. 1973.

d. Supplementary Regulations.

The zoning ordinance contains a number of so-called "Supplementary Regulations" at §22. Certain of these may be used to reduce water quality impacts of development.

(1) Off-Street Parking and Unloading Regulations.

Requirements for off-street parking and unloading in each district are specified in §22.A., GLZO. Parking areas can create serious runoff and sedimentation-related sources of pollution. Despite this, no standards for regulation of such are provided in §22.A. Inclusion of drainage requirements in that section, or perhaps by independent section or ordinance, should be made. Section 29-20-104, C.R.S. 1973, as well as other sections of the enabling legislation, would seem to authorize such requirements.

(2) Conditional Use Regulations.

Section 22.B., GLZO, contains general standards applicable to all conditional uses in each district. Such uses may be allowed only if, in addition to meeting the specific requirements enumerated for each zone, they meet the following:

1. The use does not create any water pollution and does not create offensive noise, dust, vibration, smoke, odors, heat, glare, snow storage problems, environmental problems, or other objectionable uses beyond the boundaries of the property on which the use is located.

2. The use conforms to other considerations deemed necessary by the Planning Commission to protect the health, safety, welfare, and morals of the area in which the use is located.

The Planning Commission may request information demonstrating methods to be used to minimize smoke, odors, dust, heat, and similar environmental and snow storage problems.

Except for the specific requirements of §8.B.8., GLZO, dealing with rock crushers and similar conditional uses in the open district, these requirements are more detailed than the generally applicable requirements. See, for example, §8.B.6., GLZO. Inclusion of these standards in both sections may be redundant. The following is recommended:

1. Strengthening the conditional review requirements as detailed in §II.B.2.c.3., supra, in order to increase control over water quality impacts of conditional uses.

2. Including those requirements either as parts of the applicable District requirements or the supplementary regulations, but not both.

e. Variances.

Variances to the terms of the zoning ordinance are permitted under §24.C.2., GLZO. Standards for the grant thereof appear in §24.C.4., GLZO. Neither the ordinance nor the municipal enabling legislation contains any proscriptions against the grant of a variance which might diminish water quality in the lakes. See §31-23-307(4), C.R.S. 1973. Such a proscription does seem authorized by that section, however, which generally requires that variances conform to the spirit of the ordinance, a purpose of which should be to enhance water quality, see §II.B.2.a., supra, and secure public safety and welfare. Id. Other sections of the enabling legislation add support to this conclusion. See §§31-23-301, 302, 303; 29-20-104, C.R.S. 1973. The following should therefore be considered for inclusion in the variance section of the ordinance:

1. Include in the variance section review and submission standards demonstrating to the Board of

Adjustment that no point or nonpoint source impacts will result from the grant of a variance and requiring a finding of such by the Planning Commission or Trustees as a condition of the variance.

2. Revise the Zoning Resolution to include a statement of purposes which establishes as one of the purposes of the ordinance the protection of the quality of the three lakes and all other water bodies or courses in the County. This would trigger the aforementioned requirement of §31-23-307(4), C.R.S. 1973, that no variance substantially impair the intent and purpose of the resolution. It would also establish a clear and explicit basis for the resolution which would aid in its enforcement and add support to exercise of the numerous other powers described and suggested in this section.

It might be noted that the Grand Lake Zoning Ordinance permits only area, not use, variances. Despite this, the consultant has concluded that such variances, if inadvisedly granted, can create water quality impacts. See §II.A.3.h., supra. The above considerations are therefore recommended.

f. Amendments.

Amendments to the zoning regulations and map may be had under §26, GLZO. That section establishes review requirements, submission requirements, and review procedures for the amendment of the zoning map and regulations. While generally quite good, these sections should be strengthened in certain respects.

At present, a rezoning may be permitted under the zoning ordinance if the original zoning was erroneous, area conditions have changed, and/or the rezoning is necessary to provide land for a community-related use not originally anticipated. §26.A., GLZO. The ordinance contains no specific provision which would prohibit a rezoning when such might allow a use which would degrade the water quality of the lakes. Since neither the municipal enabling legislation, §31-23-305, C.R.S. 1973, nor cases discussing rezonings, see, for example, Holly Development, Inc. v. Board, 140 Colo. 95, 342 P.2d 1032 (1959); Garrett v. Littleton, 177 Colo. 167, 493 P.2d 370 (1970); Clark v. Boulder, 146 Colo. 526, 362 P.2d 106 (1961), expressly requires such a finding, it becomes all the more important to include such a provision. Naturally, any such requirement should clearly apply to both point and nonpoint sources. It would appear that such a requirement would be authorized under §§31-23-

301, 302, 303; 29-20-104; and 24-65.1-101 et seq., C.R.S. 1973, and the above-cited cases.

In order to permit the Town to determine the impacts of a rezoning, an applicant therefor must submit certain information under §26.D., GLZO. This includes site plans, proposed method of water supply and sewage disposal, a survey, and snow storage and removal plans. In addition, in the RM, RMH, HM, CP, C, IL, and IG districts, other more detailed site and sewage information is required. There are two problems with the submission requirements:

1. The requirements appear to apply only when a change in the zoning map, as opposed to the zoning regulations, is sought. §26.D., GLZO; see also §26.B., GLZO. If this is so, the regulations should be amended so that the requirements apply with respect to both kinds of amendments. Amendments to the regulations can have serious water quality impacts, as can amendments to the maps.

2. The requirements ask for no data or plans relating to nonpoint source impacts of a proposed amendment. The same sort of requirements as suggested in §II.B.2.c.(3), supra, regarding conditional uses should be adopted.

These requirements are also authorized by the enabling legislation.

2. Building Codes.

The Town of Grand Lake has adopted the Uniform Building Code (UBC), 1970, Uniform Electric Code, and the Colorado Technical Plumbing Code. Only the building code pertains to this study.

a. Authority.

Unlike counties, which have the benefit of fairly comprehensive building code enabling legislation, municipalities must exercise their building code authority in accordance with rather dated and unspecific building provisions. §31-15-601 et seq., C.R.S. 1973. Indeed, in 1975, the legislature eliminated the specific provision authorizing the hiring of building inspectors. See former §31-15-301(1)(a), C.R.S. 1973. That office can now be filled only in accordance with the general municipal authority to hire necessary officials. §31-15-201(1)(b), C.R.S. 1973. Despite this, it would appear that the older legislation, as bolstered by more recent municipal land use enabling legislation, permits the adoption of the UBC and the inclusion of

necessary water quality-related standards within its code. See §§31-15-601; 31-15-401(1)(a), (b); 29-20-104; and 24-65.1-101 et seq., C.R.S. 1973. We will assume, therefore, that use of the UBC and water quality-related standards within the building code is authorized.

b. Specific Provisions: Chapters 29 and 70, UBC 1970.

Chapter 29 of the UBC, 1970, specifies certain excavation and foundation requirements. Chapter 70 contains excavation and grading requirements. These requirements are the same as those in Chapters 29 and 70 of the UBC, 1973, discussed in §II.A.6., supra, in relation to Grand County. Reference to that section is advised at this time.

c. Specific Provisions: Board of Appeals.

Section 204, UBC, 1970, provides for a Board of Appeals to:

1. Determine the suitability of alternate materials and methods of construction, and

2. Provide for reasonable interpretations of the Code.

Suggestions for strengthening these provisions are provided in §II.A.6., supra. The above-described enabling legislation should authorize any such additions.

3. Nuisance Regulations.

Municipalities are authorized to declare and abate nuisances. §31-15-401(1)(c), C.R.S. 1973. The Town of Grand Lake has adopted a nuisance regulation which regulates a number of acts which may result in point or nonpoint sources of water pollution, and indeed has specifically declared the pollution of water a public nuisance. §10-3-6, Grand Lake Nuisance Ordinance (GLNO).

Nuisance regulation differs in one very fundamental respect from the land use regulations described in the foregoing sections. The latter regulations seek to plan for and prevent water quality impacts before they occur. Nuisance regulations, on the other hand, would be useful to regulate water quality impacts of land use after they occur. Nuisance regulations may, therefore, prove to be an effective tool for controlling and eliminating point and nonpoint sources of water pollution from existing development or from ongoing development. Neither Grand Lake nor any other entity under

study herein has adopted such regulations. Since a section on nuisance regulation is included in §III., infra, the Grand Lake ordinance will be discussed there rather than in this section. The emphasis in that section will be to view nuisance as a method of controlling water quality impacts from existing development and land uses.

4. Potential New Regulations for Control of Development Activities Creating Water Quality Impacts.

The preceding sections regarding the various Grand Lake "land use" regulations have attempted to define potential water quality-related weaknesses in the Town's existing ordinances and to offer suggestions for their improvement. Certain water quality impacts of land development might better be regulated through the adoption of new ordinances or the substantial amendment of existing ones. It is the purpose of this section to identify new regulations which should be considered for adoption by the Town. Since these same regulations may apply equally to other entities under study herein, particularly Grand County, they will be described in a subsequent segment of this report. See §III., infra. Perceived authority for such regulations will also be identified therein. Finally, conceptual model regulations will be proposed for certain of the identified regulations in that section.

By proposing the numerous ordinances described in this section, it is not intended to imply that the Town must adopt each one in order to protect the water quality of the lakes. Rather, these are suggested as examples of potential regulatory devices, certain of which may accomplish similar goals. If it desires to adopt any of these suggested regulations, the Town, in conjunction with state and federal water quality and land use planning agencies, would be the proper body to determine which one or ones are the best suited to accomplish its water quality goals.

Finally, each of the suggested regulations is identified as an independent regulatory mechanism. As noted above, certain of them might more appropriately be included as amendments to existing regulations. The County should read the proposed regulations in that context. By combining regulations to the greatest extent possible, the burden of permit review upon the Town and applicant is reduced.

a. Ordinances Suggested for Adoption.

(1) Master Plan.

(2) Regulation on the Basis of Water Quality Impact.

(a) Impact Analysis Regulation.

(b) Impact Zoning.

(3) Floating Zones.

(4) Subdivision Regulations.

(5) PUD Regulations.

(6) Individual Sewage Disposal Regulations.

(7) Erosion Control Regulations.

(8) Grading Regulations.

(9) Drainage Regulations.

(10) H.B. 1041 Regulations pertaining to:

(a) Site selection and construction of major new domestic water and sewage treatment systems and major extensions of existing domestic water and sewage treatment systems.

(b) Site selection and development of solid waste disposal sites.

(c) Site selection and development of new communities.

(d) Mineral resource areas.

(e) Natural hazard areas.

(f) Historical, natural, and archaeological resource areas of statewide importance.

(11) Shoreline Protection Regulations.

(12) Campground and Recreational Area Regulations.

(13) Litter Control Regulations.

(14) Regulation of Existing Development:

(a) Building Permit Regulation.

(b) Nonconforming Use Regulation.

(c) Nuisance Regulation.

(d) H.B. 1041 Regulation.

(e) H.B. 1034 Regulation.

b. Regulations Which Might Be Considered for Further Study.

(1) Development Timing Regulations.

(2) Utility Extension Regulations.

(3) Acquisition of Land or Land Uses to Preserve Open Spaces.

(4) Transferable Development Rights.

C. Three Lakes Planning Commission.

The Three Lakes Planning Commission was formed by the Grand County Commissioners on March 4, 1974. Grand County Res. No. 1974-3-6. A district planning commission, it is authorized to exercise those powers specified by §30-28-119, C.R.S. 1973, within its jurisdiction. The resolution granted the Commission jurisdiction over the drainage of the three lakes and required the Commission to certify a copy of zoning plans, including a resolution and maps, to the County Commissioners by March 1, 1975. Unfortunately, as of the date of this study, the Commission has not prepared any such plans or any other materials which might be reviewed by the consultant. As in the case of each of the entities having no regulations at this time, however, authority of the Commission to adopt regulations for the control of development-induced point and nonpoint sources will be discussed and regulations suggested for possible adoption.

1. Authority of Commission.

The Three Lakes Planning Commission is authorized to exercise all authority granted to district planning commissions by the enabling legislation. Res. No. 1974-3-6. Section 30-28-119, C.R.S. 1973, contains those powers and authorizes district planning commissions to exercise all powers and to be subject to all duties imposed upon county planning commissions insofar as such relate to zoning, including the creating of zoning plans. §30-28-119(3)(b), C.R.S. 1973. The commissions may also act as boards of adjustment until a board of county-wide jurisdiction is formed. §30-28-119(4), C.R.S. 1973. The exercise of such powers is, of course, limited to the geographical jurisdiction of the commission.

It is quite clear from the enabling legislation and Resolution No. 1974-3-6 that the Three Lakes Planning Commission has only certain limited zoning powers, i.e., the power to create zoning plans and the authority to act as an interim board of adjustment. Despite this, the Three Lakes Planning Commission could perform a useful function by developing a zoning resolution and map suitable to control the somewhat unique land use and water quality problems within the three lakes region. These regulations, if adopted and enforced by the County Commissioners, would supersede less stringent County standards which would otherwise be applicable in the District. §30-28-119(4), C.R.S. 1973. Such regulations would also permit the County to regulate the unique problems of the area without amending the generally applicable zoning regulations in ways perhaps inappropriate in other areas of the County. The Three Lakes Planning Commission, in fulfilling its role as a surrogate county planning commission, could also perform the preliminary review and recommendation functions often delegated to planning commissions. The County Commissioners could well benefit from the specialized expertise of the Three Lakes Commission in making its zoning decisions on special use permits, rezonings, or similar matters.

2. Suggested New Regulations.

New regulations of the District are limited by the enabling legislation to zoning plans, including a resolution and zoning map. These would be required to be approved and adopted by the County Commissioners. §30-28-119(2)(c), C.R.S. 1973. Such regulations should include regulatory provisions described and recommended in §§II.A.3. and II.B.2., supra.

D. Water and Sanitation Districts.

In addition to the Three Lakes Water and Sanitation District, to be discussed in a separate section of this study, there are four organized and existing water and sanitation districts in the three lakes area. Each of these is located within the boundaries of the Three Lakes Water and Sanitation District. They include:

1. Grand Lake Water and Sanitation District.

2. Shadow Mountain Water and Sanitation District.

3. Columbine Lake Water and Sanitation District.

4. North Shore Water and Sanitation District.

Officials from each of these districts were contacted and asked to submit all plans, regulations, rules, or other materials adopted by the districts which would be within the scope of the contract for this study. The consultant was informed that only the Grand Lake Water and Sanitation District had such regulations. These were submitted and are reviewed below.

1. Authority of Water and Sanitation Districts.

Before discussing the Grand Lake Water and Sanitation District, it would be helpful to outline the powers of water and sanitation districts generally. These powers, applicable to all four districts, are found at §32-4-101 et seq., C.R.S. 1973. They include the following powers:

1. To enter into contracts. §32-4-113, C.R.S. 1973.

2. To acquire, dispose of, and encumber real property. Id.

3. To supervise the affairs of the district and oversee all construction and operation of facilities. Id.

4. To exercise eminent domain and take any property necessary to exercise powers granted. Id.

5. To charge fees for services provided to the district. Id.

6. To compel for health and sanitary purposes connection to a service line if such line is within 400 feet of an inhabited dwelling. Id.

7. To adopt bylaws for carrying on district business.

8. To have and exercise all rights and powers necessary or incidental to or implied from the specific powers described above. Id.

9. To levy and collect ad valorem taxes. §32-4-114, C.R.S. 1973.

Such powers are to be liberally construed to protect the public health, safety, convenience, and welfare. §32-4-130, C.R.S. 1973.

The above-described powers appear to be rather broad, though they must be read in light of existing case law.

Municipal corporations, of which water and sanitation districts are a limited kind, are generally considered to have only those powers expressly granted or necessarily implied from granted powers. City of Central v. Axton, 150 Colo. 414, 373 P.2d 300 (1962); City of Golden v. Ford, 141 Colo. 472, 348 P.2d 951 (1960). This rule, which appears to be applicable to all kinds of municipal corporations, may be additionally limited with respect to limited-purpose, quasi-municipal corporations such as water and sanitation districts. In City of Aurora v. Aurora Sanitation District, 112 Colo. 406, 149 P.2d 662 (1944), it was said that a quasi-municipal corporation was not a true municipal corporation, but merely a public agency endowed with such attributes of a municipal corporation as may be necessary in performance of its limited objectives. See also People ex rel. Rogers v. Letford, 102 Colo. 284, 79 P.2d 274 (1938). A Texas decision has gone so far as to say that a quasi-municipal corporation can exercise only those powers clearly granted. Tri-City Water District v. Mann, 142 S.W.2d 945 (Tex. 1940). While that restrictive interpretation is inconsistent with §32-4-113, C.R.S. 1973, permitting the exercise of powers implied from the expressly enumerated authority, it does further illustrate the concept that special districts are normally permitted to act only to achieve their limited objectives.

As a result of the foregoing, it would seem proper to conclude that water and sanitation districts, while having substantial authority over the construction, operation, and maintenance of sewer and water facilities, would not be authorized to exercise any form of land use regulatory powers such as zoning, subdivision control, control of critical areas and activities, or other such measures described in preceding sections. It is possible, however, that the above enabling legislation might permit water and sanitation districts to adopt the following kinds of regulations to improve the quality of discharges from their own facilities as well as to assist in regulating certain non-point sources:

1. Regulations compelling connection with sewers, expressly authorized by §32-4-113(1)(m), C.R.S. 1973.

2. Regulations conditioning the provision of services and requiring a permit as a condition therefor. Such regulations would seek to improve the quality of effluent introduced into district facilities in order to allow proper treatment. An example would be a requirement for proper pretreatment standards.

3. Plans and regulations governing the location and timing of the provision of facilities. Such could help reduce growth induced by the unplanned provision of sewer service and thus slow the introduction of development-related nonpoint sources. Direct control of such sources is not contemplated, and the legality of any particular ordinance of this type would need to be closely reviewed.

4. Regulations establishing standards for the actual work of constructing or connecting with district facilities. These would attempt to regulate erosion and sedimentation-related nonpoint sources which would be created by such construction.

5. Regulations requiring timely maintenance of all district facilities.

In addition, the following measures <u>might</u> be found lawful if reasonably exercised:

1. A water and sanitation district may exercise its eminent domain power to acquire property necessary to exercise those powers granted. It is one of the functions of a water and sanitation district to provide safe and healthful water and sanitation services. §32-4-102, C.R.S. 1973. Traditionally, water and sanitation districts have exercised the eminent domain power only to acquire land needed for installation of district facilities. It can be argued, however, that the statute permits takings of any land needed to enable a district to provide safe and healthful services. A liberal interpretation of that concept could conceivably allow a district to take lands which its facilities have opened to development if they will create nonpoint sources of water pollution. This might be particularly so if such uses injured a district's water supply. While the consultant realizes that this option may be unattractive for certain political reasons, it does provide an option which might be used in certain critical situations.

2. To fix service charges at a lower rate for those users employing measures which improve the quality of their discharges into the facilities. <u>See</u> §32-4-113(1)(l), C.R.S. 1973. Since fees may be charged <u>only</u> for paying principal and interest on indebtedness of the district, and since the purpose here would be the improvement of water

quality, such a measure may be improper. See §32-4-113(1)(1)(III), C.R.S. 1973.

It should be noted that the above suggestions have been made independently of EPA or state requirements, which may require one or more of those measures. See, for example, FWPCA §307.

2. Grand Lake Water and Sanitation District.

The Grand Lake Water and Sanitation District is the only one of the four independent districts within the boundaries of the Three Lakes District to have rules and regulations pertinent to this study. The rules are brief, though they cover each of the following topics:

1. The rules require that connections be made by licensed contractors and provide certain standards for the issuance and revocation thereof. The only requirement for the licensing of contractors is that they have at least two years of experience in laying sewer lines. Other standards to aid in the determination of an applicant's qualifications should be included.

2. The rules establish connection standards, including a requirement for compulsory connection where a nuisance exists in the absence thereof. In order to make administration of the compulsory connection regulation more simple and more effective, it would seem appropriate to compel connection any time a water quality or other health hazard is presented. The determination of what is or is not a "nuisance" can be inexact and time-consuming. Authority for so amending the regulation is found in §32-4-113(1)(m), C.R.S. 1973.

3. The rules prohibit certain uses of sewer systems by regulating the discharge of oils, acids, and other industrial wastes, drainage of waters, and discharge of grease into the system. The rules require sand traps on lines containing dirt or sand and prohibit wash racks in the absence of sand traps. While these rules provide a good beginning, they should be supplemented in accordance with the regulations of the EPA, at 40 C.F.R. Part 128, which state that the following sorts of wastes should not be introduced into treatment works:

   a. Wastes creating a fire or explosion hazard.

b. Wastes which will cause structural damage to facilities.

c. Wastes causing obstruction of flow in sewers.

d. Wastes which may create an excessive flow rate.

In addition to these, 40 C.F.R. Subchapter N specifies detailed pretreatment requirements for certain identified industrial contributors to publicly-owned sewage treatment works. Procedures for enforcing these standards, and the general pretreatment standards of 40 C.F.R. Part 128, should be included in the District's regulations.

4. Certain general provisions concerning inspection of property and cleaning of lines are included. It would seem advisable to adopt a full maintenance section to insure the proper continued functioning of sewage systems. Requirements for cleaning, repairing, and improving existing systems could be included.

In addition to the foregoing specific suggestions, the Grand Lake District should consider adoption of the kinds of proposed measures outlined in §2., supra. These would supplement existing regulations within existing enabling legislation. Adoption of the measures, whose validity was described in §2., supra, as uncertain, should only be made after close legal analysis of a particular proposed regulation.

E. Three Lakes Water and Sanitation District.

The existence of the Three Lakes Water and Sanitation District is the reason for this study. Ironically, though the District does have a Master Plan, it has adopted no rules and regulations pursuant thereto which might be the subject of this study. In all fairness to the District, it must be noted that its status has been unsettled for some time and it has hesitated to move toward the adoption of policies or rules until that status is clarified. This discussion will, therefore, concentrate on the District's enabling legislation and present a brief review of its Master Plan.

1. Three Lakes Water and Sanitation District Enabling Legislation.

Prior to discussing the District's enabling legislation, it should be noted that such must be interpreted in

light of the case law described in §II.E.1., supra. Reference to that section should be made at this time.

The Three Lakes Water and Sanitation District was created by the Colorado legislature in 1971. See §32-10-101 et seq., C.R.S. 1973. In doing so, the legislature noted that the necessity for the District resulted from population, growth and development, and resultant water pollution in the three lakes region, §34-10-101(7), C.R.S. 1973, and that the unique problems of the area required passage of a special law. §32-10-101(8), C.R.S. 1973. To assure that the District's purposes were achieved, the legislature instructed that its powers were to be broadly construed. §32-10-101(10), C.R.S. 1973. It then went on to provide that the District could exercise, inter alia, the following powers:

1. To enter into contracts. §32-10-115, C.R.S. 1973.

2. To acquire, dispose of, and encumber real and personal property necessary to accomplish the District's purposes. Id.

3. To control its affairs. Id.

4. To exercise the power of eminent domain and take public or private property. Id.

5. To construct and maintain works. Id.

6. To provide for revenues and levy ad valorem taxes. Id.

7. To adopt rules and regulations to accomplish the District's purposes and to enforce the same. Id.

8. To have and exercise all rights and powers necessary or incidental to or implied from the powers granted in this article. Id.

9. To fix fees and charges for its services, except for property zoned and used for agricultural purposes. §32-10-117, C.R.S. 1973.

10. To compel connection of inhabited premises, the nearest property line of which is within 400 feet of service lines. §32-10-117, C.R.S. 1973.

11. To develop a master plan. §32-10-179, C.R.S. 1973.

12. To enter into contracts under reasonable terms and conditions with owners of property seeking inclusion in the District. §32-10-125(4), C.R.S. 1973.

A review of these powers indicates that the Three Lakes District is able to exercise all of those powers which ordinary water and sanitation districts can exercise. See §II.B.1., 2., supra. It may also be able to exercise those powers described in that section as questionable, as well as other powers. These include:

1. The authority to exercise eminent domain to prevent water pollution of the lakes or streams tributary thereto. Section 32-10-115(11), C.R.S. 1973, authorizes the use of eminent domain as is necessary to achieve the purposes of the district. Those purposes expressly include the prevention of water pollution. §32-10-101(2), (7), and (10), C.R.S. 1973. Logically then, the District should be able to condemn land or land uses to prevent water pollution. If this is so, the District might be authorized to condemn areas of land which its facilities might open to development, if development would create water pollution hazards not susceptible to regulation, i.e., shoreline areas and the lake. This is, of course, assuming that a court would recognize such as a valid public purpose. See Colo. Const. Art. II, §15. It also assumes that such condemnation is, as §32-10-115(1) requires, necessary, and not merely helpful or convenient. If merely the latter, the attempt to exercise eminent domain for such a purpose would be barred. See Beth Medrosh Hagodol v. City of Aurora, 126 Colo. 267, 248 P.2d 732 (1952).

2. The authority to charge lower user fees of contributors who take steps to provide safely-treatable sewage to the system. Section 32-10-117(1), C.R.S. 1973, does not appear to prohibit such, as may §32-4-113, C.R.S. 1973, see §II.D.1., supra, since it does not limit the purpose of such fees, but only their use. The acknowledged water quality purposes of the District bolster this conclusion.

3. The authority to demand that persons seeking to be included within the District not use or develop their property in a way which will contribute to the pollution of the lakes. Section 32-10-125(4), C.R.S. 1973, permits the District to contract under reasonable and equitable terms and conditions with those seeking to be included in the

District. Since the express purpose of the District is to improve the lakes' water quality, a term or condition requiring the foregoing might well be considered reasonable, though restraints on the use of property are generally strictly construed. Alternatively, §32-10-125(4) may provide only the authority to prohibit the contribution of harmful wastes to the system. The latter interpretation, however, seems unduly restrictive in view of the express purposes of the District.

The consultant once again cautions that the above suggestions, as well as those in §II.D.1., 2., supra, are somewhat speculative. Water and sanitation districts have traditionally exercised only limited powers over the provision of their services. That such districts, including the Three Lakes District, have only those powers is probably the prevailing view of the courts as well as the general population. Thus, while enabling legislation may be broad enough to provide such powers, actual implementation thereof may be opposed. Review of specific proposals or regulations which might take the approaches suggested above would be necessary prior to their adoption.

2. District Master Plan.

The only document of the District available for our review is the Regional Water Quality and Sewerage Master Plan for the Three Lakes Water and Sanitation District. This document has been closely reviewed by the EPA, which voiced serious concerns about the nonpoint water quality impacts which might result from implementation of the plan. See Letter of Administrator Green, August 4, 1975. Specifically, the EPA was concerned that the system would induce rapid growth and development in the area, which plans, laws, and regulations in force would be unable to control in order to prevent nonpoint source water pollution. As stated in §I.C., supra, the consultant has assumed that implementation of any system would create such growth and development. A review of the Three Lakes Master Plan reveals that no controls or measures for the alleviation of such impacts were proposed for adoption by the District or by any other entity. Neither is it clear whether the alternative systems were evaluated in such terms. See Master Plan, p. 50. This is somewhat surprising, since certain nonpoint sources were identified by the Plan as significant sources of water pollution to the lakes. Id., pp. 17, 23-24. Thus, while the Plan may have considered nonpoint impacts of plan implementation, no measures to control these were proposed nor were existing plans and regulations evaluated. The District should closely review

the above-recommended rules, regulations, and programs, considering for adoption those which, in coordination with County and other plans, best reduce nonpoint sources.

F. Grand Lake Metropolitan Recreation District.

The final local governmental entity under review in this study is the Grand Lake Metropolitan Recreation District. The Recreation District is a sizable entity, encompassing a large part of the drainage of the lakes. It currently administers a golf course in the vicinity of Grand Lake and has proposed and partially completed tennis courts. The District has no overall development plan. Letter of Richard Doucette, Grand County Attorney, November 19, 1976. Neither has it any other plans, rules, regulations, or ordinances pertinent to this study. Enabling legislation will therefore be reviewed briefly and proposed regulations suggested.

1. Metropolitan Recreation District Enabling Legislation.

Like the water and sanitation districts' powers described above, the following description of metropolitan recreation district authority must be read in conjunction with the case law reviewed in §II.D., supra. The enabling legislation grants metropolitan recreation districts authority, inter alia:

1. To enter into contracts. §32-2-114, C.R.S. 1973.

2. To borrow and issue bonds. Id.

3. To acquire, dispose of, and encumber real and personal property, and any interest therein, for the establishment of recreational facilities, including leases and easements for the preservation or conservation of sites, scenes, open spaces and vistas of recreational, scientific, historic, aesthetic, or other public interest. Id.

4. To have the management, control, and supervision of all the business and affairs of the district, and the construction, installation, operations, and maintenance of recreational facilities therein. Id.

5. To have and exercise the power of eminent domain and dominant eminent domain in the manner provided by law for the condemnation of private property for public use to take any property within the

District necessary to the exercise of the powers granted by statute. Id.

6. To adopt and amend bylaws for carrying on the business, objects, and affairs of the board and of the district.

7. To have and exercise all rights and powers necessary or incidental to or implied from the specific powers granted by statute.

8. To levy and collect ad valorem property taxes, subject to an annual limit of four mills. §32-2-115, C.R.S. 1973.

Since the specific powers enumerated above are not to be considered as a limitation upon any power necessary or appropriate to achieving district purposes, the powers of such districts should be broadly construed. See §32-2-114(1)(m), C.R.S. 1973.

2. Recommended Rules and Regulations.

Though the authority of the Grand Lake Recreation District should be broadly construed, the consultant would not recommend, for legal and practical reasons, that the District attempt to adopt any broad regulatory scheme which would transcend its limited purposes. Thus, adoption of detailed land use regulations is not recommended. The consultant would envision that the District should exercise its traditional authority in ways which would aid in eliminating point and nonpoint sources resulting from its activities within the District. The following rules and regulations are proposed:

1. The District should adopt regulations and standards governing the construction, operation, maintenance, and use of its facilities and land which would reduce nonpoint sources emanating thereform. These might include:

   a. Erosion control, drainage, and sedimentation regulations and design standards governing construction and operation of its facilities. If possible, measures to reduce existing problems should be taken.

   b. Regulations governing the fertilization of land under its control, particularly the golf course areas, and the irrigating of the same to prevent excessive nutrient runoff.

c. Regulations controlling the use of any trails or camping areas designed to reduce erosion and sedimentation. These would, of course, gain importance as the District grows to include lands which may be used as such.

d. A program of acquisition of open spaces, to provide park and open areas abutting the lakes or tributary streams. Under §32-2-114(1)(g), C.R.S. 1973, the District is expressly authorized to acquire real and personal property for the preservation of vistas and open spaces. It may do so through the exercise of eminent domain. §32-2-114(1)(k), C.R.S. 1973. So long as such acquisitions were for District purposes and served the public health, safety, and welfare, acquisition of open space with the additional purpose of reducing nonpoint sources would likely be valid. See §32-2-101, C.R.S. 1973. Acquisition for that reason alone would, however, likely be determined to be invalid. §32-2-113(1)(g), C.R.S. 1973.

It is once again cautioned that the types of regulations and programs proposed are not the sort of regulations recreation districts have traditionally adopted. Before any specific measures were adopted, they would need to be carefully reviewed to determine their legal validity.

G. Federal Lands.

The majority of all land within the drainage of the three lakes is public land in the ownership of the federal government. Those lands are administered primarily by the United States Forest Service, which administers the Arapaho National Forest, and the Park Service, which administers Rocky Mountain National Park and the Shadow Mountain National Recreation Area, with small amounts under the jurisdiction of the Bureau of Land Management. The very extent of the federal land holdings in the region indicates that certain nonpoint and point sources are and will be contributed therefrom. The engineering consultant has identified certain ones:

1. Road construction, especially for silvicultural and recreational activities.

2. Silviculture.

3. Mining.

4. Erosion of motor bike, hiking, and riding trails.

5. Campgrounds.

Each of these nonpoint sources arises from the use of federal lands within the basin.

While nonpoint sources are contributed from federal lands, it is not likely, with one possible exception, that development of a collection and treatment system on fee land would heavily increase such sources. It is anticipated that federal lands would not be available for development as home sites, lodges, businesses, or other uses whose development might be directly spurred by construction of the system. While hiking, biking, or riding trails, and perhaps campground or picnic areas, might suffer some increased use from the increased population of the region, the water quality impacts would probably not be greatly accentuated as a result of the development of the District's system.

There may be a significant exception to the foregoing. The Grand County Master Plan clearly envisions development of a ski area in the Kawunechee Valley. Grand County Master Plan, p. 11. The Forest Service Management Plan, at §325.1, indicates that the Service also envisions ski areas when County planning and zoning is ready to control the impacts thereof. §325.3.e., f., USFS Management Plan. As the EPA has recognized, construction of the District's system could result in increased pressure for the development of a ski area in the Valley. See EPA Staff Memorandum on the Three Lakes Water and Sanitation District's Proposed Wastewater Treatment System, §4. Development of the ski area would in turn stimulate additional growth and development, possibly in the sensitive Kawunechee Valley.

The foregoing indicates that certain limited nonpoint and point source water quality hazards exist on federal lands within the region, and that these may be enhanced by construction of the District's system. The Forest Service, Park Service, and to a lesser degree, the BLM, must recognize their responsibilities in controlling impacts resulting from activities on the lands they administer. The following measures should be a part of land use decisions of those agencies:

1. The above-mentioned federal agencies should adopt appropriate rules and regulations adequate to control all nonpoint and point sources generating activities occurring on the lands under their jurisdiction. Five specific sources have been identified above. Any others must also be controlled. Such rules and regulations should govern

activities which create nonpoint sources and provide standards and criteria limiting and directing land uses as necessary to eliminate such sources. Thus, restrictions on time and place of use, intensity or type of use, requirements for specific control devices, and other measures should be considered. There appears to be little doubt that the federal government, with its extensive authority over the management of federal lands, could lawfully adopt such regulations to achieve water quality goals.

2. If any ski area is constructed in the three lakes drainage, the Forest Service (the Park Service has no plans for any such area, see Rocky Mountain National Park Final Master Plan, January, 1976) should insure throughout its planning, construction, and operation that design and use of the area are done in such a way as to minimize all sources of water pollution. Again, this is well within the regulatory and management authority of the Forest Service.

3. No ski area should be approved or constructed unless all Grand County and other local plans, rules, regulations, and laws are adequate to control the water quality impacts of the intense land development which will result from construction of the ski area.

4. Any special use permits granted by any of the federal agencies with jurisdiction in the three lakes for use of lands administered thereby should be conditioned by specific requirements that all activities be carried on in a way which will prevent point or nonpoint sources of water pollution. Where applicable, for example in the case of point source silvicultural activities, 40 C.F.R. Part 125, EPA standards should be invoked.

III. PROPOSED ORDINANCES.

Throughout §II., supra, the consultants suggested numerous new and revised regulations and ordinances which the various entities with jurisdiction over land within the Three Lakes District might consider for adoption. Particularly in the case of new regulations, no models were proposed for adoption. Those will be presented in this section.

The format which will be utilized herein will be to describe numerous conceptual regulations and ordinances, rather than to propose detailed documents ready for adoption. These conceptual models will consist of brief descriptions of proposed ordinances, highlighting the types of procedures and review requirements which should be included therein. The consultant does not feel that it would be proper to attempt to draft detailed local regulations for adoption. These should be drafted by local authorities having available full and specific information on the nature of local problems.

In a number of instances, more than one model conceptual regulation or ordinance directed at the same problem has been proposed. This is not to imply that adoption of redundant regulations is necessary, but is merely an attempt to supply alternative forms of regulation.

Perceived authority for each of the proposed regulations and ordinances will be included in conjunction therewith.

Finally, the consultant has suggested regulations and ordinances which it believes would be necessary or helpful to control nonpoint and point source impacts of development within the three lakes region and which appear to be authorized by enabling legislation. The feasibility of these regulations from a local political or fiscal standpoint must be determined by the various entities in the region themselves.

A. Master Plan.

Though authorized under §31-23-101 et seq., C.R.S. 1973, the Town of Grand Lake does not have a master plan to control its future growth and development. Since development of any new or upgraded collection or treatment facilities and construction of any new ski area could dramatically affect growth, a competent planner should be retained to develop such a plan. The scope of the plan will necessarily depend upon the Town's resources, but it should consider adoption of a statement of policies and a map similar at the minimum to those recently adopted by Rio Blanco County.

These can be an important tool in regulating growth and development, since no street, square, park, or other public way, ground, or space, public building or structure, or public or private utility may be located in a planned area until approved by the planning commission. §31-23-109, C.R.S. 1973. In addition, adoption of the major street plan portion of a master plan permits a municipality to adopt subdivision regulations, a critical tool in minimizing water quality impacts of development. §31-23-113, C.R.S. 1973.

Without attempting to draft a master plan, the consultant would recommend that any such plan establish as a municipal policy that water quality impacts of future growth and development be considered in all local decisions. Such appears clearly authorized by §29-20-104, C.R.S. 1973, and §31-23-107, C.R.S. 1973. The following specific policies should be included within the plan:

1. The zoning plan, including text of regulations and a map, required by §31-23-106(1)(d), C.R.S. 1973, should accomplish the following:

    a. Future growth and development should be located in a manner minimizing water quality impacts thereof.

    b. All zoning decisions should require information necessary to assure that development will be located and carried out in a manner consistent with enhancement of the lakes' water quality.

2. The character, location, and extent of streets, bridges, and other ways and spaces should conform to the following:

    a. Streets and other ways should be developed and constructed in a fashion which minimizes nonpoint sources of water pollution.

    b. Streets and other ways should be located where:

        (1) Their placement will reduce water quality impacts.

        (2) Any related development induced thereby will create no water quality hazards to the lakes.

    See §31-23-106(1)(a), C.R.S. 1973.

3. The general location, extent, and character of public open spaces, parks, and grounds shall be

designed to aid in the amelioration of all water quality impacts of development surrounding the spaces. Id.

4. The location of public utilities should be made in areas best able to handle impacts thereof. §31-23-106(1)(b), C.R.S. 1973. More importantly perhaps, the extent of public utilities should be consistent with local needs and not encourage development having deleterious impacts upon water quality. Id.

5. A factor coequal with others in local decision-making and regulation should be whether the result of any decision or regulation will enhance and protect the water quality of the lakes. §§29-20-104, 31-23-107, C.R.S. 1973.

Inclusion of the above policies, as expanded to meet specific local conditions, is a necessity in the local master plan. To effectively control all point and nonpoint sources of water pollution, the Town must establish as a policy that local decision-making and regulation will be carried out to reduce those sources.

B. Regulation of Development on the Basis of Water Quality Impacts.

Perhaps the most direct way to control development-related water quality hazards is to regulate that development on the basis of its potential impact on water quality. It seems safe to say that counties, see §§29-20-104; 30-28-111, 113, 115, 133; 24-65.1-101 et seq., C.R.S. 1973, and municipalities, §§31-23-301, 302, 303; 29-20-104; 24-65.1-101 et seq., C.R.S. 1973, may regulate development on this basis. Regulations are proposed below.

1. Impact Analysis Regulation.

One method of impact regulation is to provide local review of the kind required by NEPA. Rio Blanco County is currently considering such an approach. See proposed RBCO §1001 et seq.

a. Scope.

Impact analysis regulation adopted for use by county or municipal governments should require review of all proposed county actions and require that all "county actions" do not cause significant adverse effects on the county or its incorporated municipalities. A "county action" is defined to include all proposed rezonings, conditional uses, variances, building permits, subdivision plats, individual

sewage disposal permits, and H.B. 1041 permits. Before any "county action" may be taken, its impact must be reviewed.

b. Nature of the Review.

The proposed Rio Blanco County regulation requires that an impact statement must be prepared prior to the approval of any "county action." The impact statement must detail the impact of the proposed "county action" upon specified services and utilities such as sewerage and sanitation, water supply, solid waste disposal, and storm drainage. The impact statement must also outline the impact of the proposed "county action" upon certain "matters" such as water quality, soil and geology, and vegetation.

c. Exemptions.

The proposed Rio Blanco regulation would not apply to proposed "county actions" regarding single-family dwellings used as residences.

d. Performance Standards and Review Criteria.

The regulation requires submission of the impact statement to various state and local officials and requires those officials to determine the effect of the proposed action upon the cost of providing and maintaining services and activities. The regulation also requires that the planning commission and the county commissioners find that the proposed county action will not reduce the quality nor significantly increase the costs of providing the services, activities, and matters specified in the regulation.

This type of impact analysis regulation could also include specific standards which relate to the protection and maintenance of water quality. This type of regulation provides a technique for evaluating impacts which might result from the approval of virtually any county land use activity. The regulation acts as an early-warning system which alerts the county and other officials of potential adverse impacts associated with proposed developments. It also allows the substantive review of the specific details of the proposal to occur within the subsequent zoning, subdivision, or building permit procedures.

e. Enforcement.

The proposed Rio Blanco County regulation prohibits the taking of any county action which it has been found will negatively impact the county's environment or ability to provide services.

2. Impact Zoning.

The term "impact zoning" is a generic term which can include a host of zoning approaches. Thus, special use review can perhaps be considered a form of impact zoning in that it requires review of a proposed use prior to its location. In this section, however, the approach proposed for the City of Cincinnati will be discussed. See, Manley, "Cincinnati Strategy for Environmental Quality Overlay Zones," 7 Urban Lawyer 96 (1975). Such an approach, as modified to meet the needs of the County, the Town of Grand Lake, and perhaps Three Lakes Planning Commission, appears authorized by the same statutes enumerated in §III.B.1., supra.

a. Scope.

The proposed regulation or ordinance is designed to regulate new development by providing certain county or town-wide or certain special areawide overlay standards to measure and control development-related impacts.

b. Regulatory Approach.

Initially, certain review and performance standards for the control of water quality impacts would need to be developed. These standards would then be "overlayed" or applied, in addition to all other standards in the zoning ordinance, in those areas or existing zones where potential water quality impacts of development have been determined to be most severe. If certain hazards are found to exist throughout the region, these standards would be applied region wide to reflect this finding. For example, in areas where soil disturbance may create a particular nonpoint pollution concern, standards relating directly to that concern would be imposed or "overlayed" in addition to the generally applicable standards in a zone. Similar approaches could be taken, for example, in shoreline areas, areas along or near streams, areas of hilly or mountainous terrain which are subject to erosion, and other such areas. Similarly, overlay of certain standards to regulate potentially hazardous activities in any area could be imposed. Thus, surface mining standards might be adopted to regulate that activity. This approach, of course, has the advantage of making certain restrictive standards applicable only in those areas where conditions necessitate their use or only in relation to activities which have been determined to be hazardous.

c. Review and Performance Standards.

The kinds of special overlay provisions which might be considered for adoption are as follows:

1. Erosion Control.

2. Sedimentation Prevention.

3. Drainage Control.

4. Grading Requirements.

5. Road and Other Paved Area Location Restrictions.

6. Density Requirements.

7. Standards Regulating Development of Sloping Terrain.

8. Landscaping and Vegetation Protection Requirements.

These examples would, of course, need to be supplemented in accordance with local experience.

d. Enforcement.

The overlay impact system is enforced through the building code. No building permit may be obtained until all overlay and other requirements applicable within the zone are shown by the applicant to be met. In the proposed Cincinnati ordinance, the burden of meeting all such requirements is on the developer, who must show in an environmental impact statement that the proposed development will create no environmental hazards relating to the criteria and standards set forth in the zone.

C. Floating Zone.

Floating zones can be extremely useful in regulating certain uses which may be hazardous to water quality within the three lakes region. Floating zones function essentially like any other in that they specify certain uses which may be permitted therein. The crucial difference, however, is that floating zones do not appear on the zoning map but are located, generally by amendment to the map, after application therefor. Each application is studied by the local planning and permit authorities and will be granted only if the requested location is compatible with all review standards established for a particular zone. The review standards will reflect the nature of the uses permitted in the zone. Though a somewhat unique approach, floating zones appear to be authorized for counties, §§30-28-111, 112; 29-20-104; 24-65.1-101 et seq., C.R.S. 1973, and municipalities, §§31-23-301, 302, 303; 29-20-104; 24-65.1-101 et seq., C.R.S. 1973. Interestingly, the Town of Grand Lake has adopted a floating zone for certain mobile home uses. §16.1, GLZO. Rio Blanco County has done the same, see 1974 RBCO, and has studied such for certain industrial uses.

1. Scope.

The floating-zone approach could be used as a means of permitting many kinds of uses which could impact water quality. These could include all of the following uses permitted in the Grand County and Grand Lake zoning regulations:

1. Mobile homes.

2. Certain hazardous industrial uses, such as feedlots, rendering plants, and uses requiring chemical processing.

3. Certain hazardous commercial uses, such as gasoline stations.

4. Surface mines or quarries.

5. Cement plants or stone crushers.

6. Certain large residential developments.

7. Sewage disposal facilities.

8. Solid waste sites.

2. Regulatory Approach.

Prior to permitting the location of any "floating zone," an application therefor should be reviewed to determine the following:

1. Erosion due to establishment of any use shall be controlled to prevent water pollution.

2. Sedimentation shall be controlled.

3. Drainage adequate to prevent nonpoint source water pollution shall be provided.

4. All grading shall be carried on to minimize water quality impacts.

5. Natural vegetation shall be retained and landscaping adequate to aid in reducing nonpoint sources shall be provided.

6. Density shall be regulated and open spaces provided to help regulate nonpoint sources.

See §II.B.2.c.4., supra.

The burden of submitting such information is on the applicant. It is to be reviewed by the appropriate authorities subject to the mandatory standard that no floating zone shall be located which will, for any reason, degrade the ambient water quality of the lakes.

3. Enforcement.

The floating zone concept is generally enforced by requiring that the zone be located by amendment to the zoning map. Thus, to locate the zone, a person must apply for an amendment to the map, which amendment is then subject to review in accordance with the requirements of the foregoing section. No amendment would be allowed unless water quality impacts could be effectively and properly eliminated.

D. Subdivision Regulations.

Of all the entities studied herein, only Grand County and Grand Lake would be competent to adopt subdivision regulations. Grand County has done so. Its regulations were described and discussed in §II.A.3., supra. The Town of Grand Lake has not done so. Because subdivision regulations are an important tool in regulating water quality impacts of development, the Town should move toward adoption of these regulations.

There is a preliminary problem which the Town must meet before adopting subdivision regulations. Municipal enabling legislation does not permit the adoption of subdivision regulations until a major street plan has been adopted. §31-23-213, C.R.S. 1973. While such a plan is not defined, it must be assumed that it is the street plan portion of a municipal master plan. See §31-23-206(1)(a), (c), C.R.S. 1973. Unfortunately, the Town has adopted no master plan nor any portion thereof. Thus, before it can adopt subdivision regulations, a necessary component for regulation of water quality, the Town must adopt at least a major street plan. See §III.A., supra.

The style and substance of subdivision regulations have been described in relation to the Grand County Subdivision Regulations in §II.A.3., supra. It would serve little purpose to reiterate those here. Reference should be made to that discussion which will serve as a conceptual model for local regulations as well. Particular attention should be given to the perceived weaknesses in those regulations as discussed by the consultants and an effort made to avoid similar deficiencies in the Grand Lake version.

E. Planned Unit Development Regulations.

Grand County and Grand Lake are the only entities with authority to adopt a PUD regulation pursuant to §24-67-101 et seq., C.R.S. 1973. Grand County has adopted such a regulation, which is discussed at §II.A.5., supra. The Town of Grand Lake has adopted no full PUD ordinance but has only provided certain "density" standards in its zoning ordinance. See §II.B.1.c.(1), supra. These may be invalid. In order to resolve the question of their validity and to provide a better control mechanism for the establishment of PUD's within Grand Lake, the Town should adopt a PUD regulation which complies with §24-67-101 et seq., C.R.S. 1973.

As in the case of the subdivision regulations, it would be unnecessarily repetitive to propose a model ordinance herein when one was discussed in §II.A.5., supra. Reference to that discussion is particularly appropriate since counties and municipalities operate under identical PUD enabling legislation. Particular attention should be directed toward the weaknesses perceived in the Grand County regulation by the consultant.

It should be noted that the enabling legislation does set certain requirements for PUD ordinances. Section 24-67-104 states that municipalities may adopt a PUD ordinance which:

> "(a) Refers to [§24-67-101 et seq., C.R.S. 1973];
>
> "(b) Includes a statement of objectives of development;
>
> "(c) Designates the board, which may be a commission, board, or the governing body of the county or municipality, authorized to review planned unit development applications as set forth in this article;
>
> "(d) Sets forth standards of development consistent with the provisions of section 24-67-105;
>
> "(e) Sets forth the procedures pertaining to the application for, hearing on, and tentative and final approval of a planned unit development which shall afford procedural due process to interested parties. The resolution or ordinance shall establish maximum time periods within which any application shall be reviewed and approved, disapproved, or conditionally approved. At least one public hearing shall be held by the board designated pursuant to para-

graph (c) of this subsection (1) prior to approval, disapproval, or conditional approval of a planned unit development. Public notice of the public hearing shall be given in the manner prescribed by sections 30-28-116 or 31-23-304, C.R.S. 1973, whichever is applicable, for the amendment of zoning resolutions and ordinances. Written notice of the public hearing shall be delivered or mailed, first-class postage prepaid, at least fifteen days prior to the public hearing to adjoining landowners.

"(f) Requires a finding by the county or municipality that such plan is in general conformity with any master plan or comprehensive plan for the county or municipality."

In addition, the act establishes the following standards and conditions for PUD's, which are to be included within municipal ordinances:

"(1) Every resolution or ordinance adopted pursuant to the provisions of this article shall set forth the standards and conditions by which a proposed planned unit development shall be evaluated which shall be consistent with the provisions of this section. No planned unit development may be approved by a county or municipality without the written consent of the landowner whose properties are included within the planned unit development.

"(2) Such resolution or ordinance shall set forth the uses permitted in a planned unit development and the minimum number of units or acres which may constitute a planned unit development.

"(3) Such resolution or ordinance may establish the sequence of development among the various types of uses.

"(4) Such resolution or ordinance shall establish standards governing the density or intensity of land use, or methods for determining such density or intensity, in a planned unit development.

"(5) Such resolution or ordinance shall specify information which shall be submitted with the planned unit development application to ensure full evaluation of the application, and the board designated pursuant to section 24-67-104(1)(c) may require

such additional relevant information as it may deem necessary.

"(6) (a) Such resolution or ordinance may provide standards for inclusion of common open space." (emphasis supplied)

The Grand County regulation appears to include requirements and provisions relating to each of the foregoing and to expand upon them. The discussion of the regulation should be reviewed at this time.

F. Individual Sewage Disposal Regulations.

Pursuant to §25-10-101 et seq., C.R.S. 1973, Grand County has adopted Individual Sewage Disposal Regulations which closely follow the state model regulations. §II.A.4., supra. The Town of Grand Lake has not done so. Despite its apparent jurisdiction to enforce its regulations within the Town of Grand Lake, see §25-1-504, C.R.S. 1973, the County has not done so. If towns are authorized to adopt individual sewage disposal regulations, Grand Lake should do so to protect against degradation of the lakes' water quality due to this source.

The question of the authority of Grand Lake to adopt such regulations arises upon a review of the enabling legislation. Section 25-10-109, C.R.S. 1973, vests "primary responsibility" for enforcement of individual sewage disposal regulations with local health departments and boards of health. Local health boards are defined by the Individual Sewage Disposal Act to include local, county, district, or regional health boards. §25-10-103(9), C.R.S. 1973. "Local health department" is defined to mean any city, county, city and county, district, or regional health department, and may include a local board of health. §25-10-103(10), C.R.S. 1973. Whether "local board of health" means a town health board is defined to mean any city, county, city and county, district, or regional health department, and may include a local board of health. §25-10-103(10), C.R.S. 1973. Whether "local board of health" means a town health board is uncertain under these sections. Indeed, towns are not included in the enumeration in subsection (10). See also §25-10-111, C.R.S. 1973, similarly omitting any reference to "towns." Consequently, it is possible that towns are not authorized to have "primary responsibility" for enforcing individual sewage disposal regulations. Such an interpretation would, however, be inconsistent with §25-1-609, C.R.S. 1973, which permits every incorporated city or town to appoint a board of health. See also §31-15-201(1)(c), C.R.S. 1973, and §31-15-401(1)(a), 501(1)(b), 501(1)(a), and 709(1)(a), each of

which appears to provide authority to regulate certain individual disposal systems. To prohibit towns from exercising such authority is also inconsistent with the state policy of controlling the pollutants from such systems to the greatest extent possible. §25-10-102, C.R.S. 1973. It would appear reasonable to conclude that towns do possess the authority, therefore, to act under the individual disposal systems act. Because detailed analysis of the County's regulations was not made in §II.A.4., supra, the consultant offers the following ordinance, drawn from the state's model.

1. Scope.

Any individual sewage disposal ordinance should regulate the installation, operation, and maintenance of the various types of individual systems. These may include:

1. Absorption Systems.
2. Aerobic Systems.
3. Dispersal Systems.
4. Evapotranspiration Systems.
5. Privies.
6. Vaults.
7. Mini-Systems (those regulating small amounts of effluent from sinks, tubs, showers, and the like).
8. Septic Tanks.

The regulations should also permit and regulate new systems, which may require the use of technology not mentioned in existing regulations.

2. Regulatory Approach.

Like subdivision regulations, individual sewage disposal regulations should, and must by state statute, §25-10-104, 105, C.R.S. 1973, provide standards for location, construction, performance, installation, alteration, and use of such systems, as well as procedures for the review of applications to construct and use such systems. The latter must, under §25-10-106, C.R.S. 1973, govern all aspects of permit applications, testing, inspection, issuance and cease and desist orders, maintenance, cleaning, and waste disposal relating to such systems. The regulations should also include regulations providing for the licensing of qualified systems contractors and cleaners, §25-10-108, C.R.S. 1973, to assure that construction and maintenance are carried out by proper personnel.

3. Enforcement.

The regulatory scheme is enforced by requiring any person desiring to install an individual system to obtain a

permit therefor. The permit is issued upon compliance with local regulations. As noted above, the regulatory scheme is enforced by local boards or departments of health. §25-10-109, C.R.S. 1973. Enforcement must be consistent with §25-10-111, C.R.S. 1973, which provides:

> "(1) No city, county, or city and county shall issue to any person a permit to construct or remodel a building or structure which is not serviced by a sewage treatment works, until a permit for an individual sewage disposal system has been issued by the local health department.
>
> "(2) No city, county, or city and county occupancy permit shall be issued to any person for the use of a building which is not serviced by a sewage treatment works until a final inspection of the individual sewage disposal system has been made by the local health department, as provided for in section 25-10-106(1)(h), and the installation has received the approval of the local health department.
>
> "(3) No individual sewage disposal system presently in use which does not comply with the provisions of section 25-10-105(1)(e) regarding minimum separation between the maximum seasonal level of the groundwater table and the bottom of an absorption system shall be permitted to remain in use without compliance with this article and the rules and regulations adopted under this article, later than October 1, 1975.
>
> "(4) Construction of cesspools, defined as covered underground receptacles which receive untreated sewage from a building and permit the untreated sewage to seep into surrounding soil, is prohibited.
>
> "(5) Not more than one dwelling commercial, business, institutional, or industrial unit shall be connected to the same individual sewage disposal system unless such multiple connection was specified in the application submitted and in the permit issued for the system.
>
> "(6) No person shall construct or maintain any dwelling or other occupied structure which is not equipped with adequate facilities for the sanitary disposal of sewage without endangering the public health."

In addition, local boards of health may prohibit individual systems in certain hazardous areas. §25-10-110, C.R.S. 1973.

G. Erosion Control Regulations.

Throughout the preceding sections of this report, the necessity for erosion control regulations and ordinances was emphasized. It was suggested that erosion control standards might be included within an existing regulation, such as a subdivision regulation, or adopted as an independent regulation. It would appear that a county is authorized to adopt such a regulation under its zoning authority, §30-28-111, 113, 115, C.R.S. 1973, its subdivision regulations, §30-28-133(4)(b), (5), (6)(c), C.R.S. 1973, or as an independent regulation. §29-20-104, C.R.S. 1973. Such might even be proper within a building code. See §30-28-201 et seq., C.R.S. 1973. Municipalities may adopt such regulations under zoning, §31-23-301, 302, 303, and subdivision enabling legislation. §31-23-206, 207, 214, C.R.S. 1973. Section 29-20-104, C.R.S. 1973, appears to add authority for independent regulations and H.B. 1041 also enhances municipal authority. Erosion control provisions within a PUD also appear to be lawful. §24-67-105, §31-23-313, §29-20-104, C.R.S. 1973. The following sample regulation, drawn largely from the EPA-Performance Controls volume and the proposed Pitkin County Regulations, is proposed.

1. Scope.

Erosion control ordinances or regulations seek to control soil erosion and sedimentation by requiring adequate provisions for surface water retention and drainage. A typical erosion control ordinance provides that no land may be disturbed unless a soil erosion and sedimentation control plan is approved by a local zoning or building administrator.

2. Nature of the Review.

A separate soil erosion and sedimentation control plan must be submitted and must include information on existing natural features, proposed changes, control measures, and a schedule of installation of control measures.

3. Exemptions.

One- and two-family dwellings, home gardening, and farm operations pursuant to an approved farm conservation plan are normally exempted from the erosion control plan requirement. Each exemption request should be reviewed to assure that the grant of such will create no water quality-related problems.

4. Performance Standards.

General principles and standards are included in the ordinance requiring that the land-disturbing activity minimize disturbance of soil, preserve vegetation, and accommodate increased runoff. Specific standards are frequently included by reference to state and local soil conservation standards. Erosion control regulation could be coordinated with grading permit regulation and/or drainage control regulation. While erosion control standards may be particularly suited for a subdivision regulation, an independent regulation or ordinance has the advantage of applying to developments not classified as subdivisions and may be able to be applied to construction in approved subdivisions.

H. Grading and Excavation Regulations.

Both the County and Grand Lake have adopted grading and excavation regulations as part of their building codes. These have been reviewed and analyzed in §§II.A. and II.B., supra. Though none of the special districts with jurisdiction in the three lakes region has adopted such regulations, the consultant has suggested that it may be possible for them to do so. See §32-4-113, C.R.S. 1973, for authority of water and sanitation districts generally; §32-10-115, C.R.S. 1973, for authority of the Three Lakes Water and Sanitation District; and §32-2-114, C.R.S. 1973, for authority of the Grand Lake Metropolitan Recreation District. The following suggested regulation, drawn from the EPA-Performance Controls volume, would be equally applicable to each district and would serve as a model to the County and Grand Lake, each of whose grading regulations need strengthening to provide water quality-related requirements as part of their regulations. It should be noted that regulation of grading and excavation under building codes -- the approach of Grand Lake and Grand County -- would appear to limit the application of the regulations to grading involving the construction of buildings or structures. See §30-28-201, §31-15-601 et seq., C.R.S. 1973; §102, UBC (1970), adopted by Grand Lake; §102, UBC (1974), adopted by Grand County. As a result, such regulations might more wisely be placed in a generally applicable zoning regulation or an independent regulation. Authority therefor would seem to exist. See §30-28-111, 113, 115, C.R.S. 1973, for county zoning; §30-28-133(5), 6(c), C.R.S. 1973, for county subdivision regulation; and §29-20-104, C.R.S. 1973, which appears to permit counties and municipalities to adopt independent regulations. Municipal zoning authority is found at §31-23-301, 302, 303, C.R.S. 1973, and subdivision authority at §31-23-206, 207, 214, C.R.S. 1973.

A local grading and excavation permit system requires that permits be obtained from the county or city engineer or building official prior to the commencement of any grading or excavation activity. A grading or excavation permit application would normally accompany a development request or building permit application.

1. Nature of the Review.

The permit application normally requires the submission of a vicinity map, subsurface geology reports, application fee and/or bond, a grading plan, including drainage and erosion control plans, and schedules and specifications for construction.

2. Exemptions.

Exemptions from the permit requirements are normally made according to cubic yards to be removed. For example, an excavation or grading involving less than 20 cubic yards may be exempted. To insure that no water quality impacts result, exemptions which would create such impacts should be denied. Mining and sand and gravel operations are regulated separately.

3. Performance Standards.

a. General.

General standards relating to preservation of natural topography and vegetation, geological hazards, soils and erosion, and sedimentation control are included. Separate erosion and sedimentation control ordinances may be required in order to prohibit or specifically limit grading in certain areas. This may be especially true where there are steep slopes, easily erodible soils, or identified water pollution problems. A separate grading regulation allows for the review and regulation of construction activities within approved subdivisions and previously plotted lots.

b. Specific.

Specific standards relating to the following are normally included:

1. Standard cover cuts and steepness of finished slope;

2. Standards for fill-type of material used in compaction, steepness of finished slope;

3. Setbacks;

4. Drainage.

c. Permit Conditions.

Grading and excavation permits frequently include conditions relating to the following:

1. Time limits on construction;

2. Public safety;

3. Protection of utilities;

4. Protection of adjacent property;

5. Prohibition of water quality degradation.

d. Inspection Requirements.

Regulations can require supervision of grading by a registered professional engineer. Regulations can also require the submission of final reports after completion of grading.

I. Drainage Regulations.

Effective drainage facilities can aid in preventing erosion of developed areas, promote proper collection of all storm waters and wastes carried thereby, and promote discharge of collected storm waters in a manner which will not be injurious to water quality. Of the entitites studied herein, only Grand County, by its subdivision regulations, and Grand Lake, in certain instances within its zoning ordinance, regulate the installation of storm water drainage facilities. Those have been described and suggestions for their improvement offered. None of the special districts has any drainage regulations, despite the fact that the Metropolitan Recreation District might be able to benefit directly from such. For example, proper drainage from the District's golf course could promote the water quality goals EPA seeks to achieve in the lakes. Therefore, the consultant has described a drainage regulation below.

1. Scope.

Drainage control plans normally establish a master plan for storm drainage which includes the provision of facilities for the collection and temporary detention of storm runoff waters resulting from rain or melting snow. Typically, a storm drainage plan must be submitted and approved by the local government prior to the issuance of any building permit.

2. Nature of the Review.

The local government examines the proposed storm drainage master plan to determine whether the proposed system will be adequate to control and treat storm water runoff and construction and whether said construction is in conformance with the storm drainage master plan. The local government may also require the construction of facilities necessary to meet the requirements of the master plan. The local government may require on-site detention storage facilities and may assess a fee to allow the local government to construct the necessary improvements. Where feasible, full treatment of runoff waters is required.

3. Exemptions.

Some ordinances exempt single-family residences but assess those residences a special, predetermined fee. If there is an intent to subject lots in approved subdivisions to drainage requirements, it may be unwise for the entities herein to take this approach. In any case, no use which will create a water pollution hazard in the lakes should be exempt.

4. Specific Requirements.

Specific review and submission requirements such as the following, adapted from the Pitkin County Land Use Code, may be considered:

1. Complete drainage systems for the entire subdivision shall be designed by an engineer and submitted to the Planning Commission prior to the issuance of any improvement permits. These systems shall be shown graphically. All existing drainage features which are to be incorporated in the design shall be so identified. If the Final Plat is to be presented in sections, an approved general drainage plan for the entire area shall be presented with the first section and appropriate development stages for the drainage system for each section shall be identified.

2. The drainage system shall be designed to:

   a. Permit the unimpeded flow of natural watercourses;

   b. Insure adequate drainage of all low points;

   c. Consider the drainage basin as a whole, accommodate not only runoff from the proposed

subdivision but also, where applicable, accommodate the runoff from areas adjacent to and "upstream" from the subdivision itself.

d. Permit collection and retention of storm water runoff in a fashion which will protect and enhance the water quality of all lakes and streams within the drainage basin.

3. All proposed surface-drainage structures shall be indicated.

4. All appropriate designs, details, cross-sections and dimensions necessary to clearly explain proposed construction materials and elevations shall be included in the drainage system plan.

5. Any contemplated floodplain encroachment or channeling shall be thoroughly analyzed and its effect on stream flow determined before it is undertaken. Any construction, dumping and filling operations in a designated floodway shall constitute an encroachment.

5. Statutory Authority.

The following statutes provide authority to local governmental entities to enact regulations controlling drainage and surface runoff:

Counties: §30-28-133(3)(a)(VII), 4(6) and 6(c), C.R.S. 1973.

Municipalities: §30-28-111, 113, and 115, C.R.S. 1973.

General authority for such regulations is also provided by §29-20-104, C.R.S. 1973.

J. Regulation of Critical or Hazardous Areas and Activities.

With the passage of House Bill 1041, as codified at §24-65.1-101 *et seq.*, C.R.S. 1973, and House Bill 1034, as codified at §29-20-101 *et seq.*, C.R.S. 1973, regulation of development in and regarding certain hazardous areas and activities was expressly approved by the state legislature. H.B. 1041, which enumerates 21 separate areas and activities, provides a comprehensive list of matters which may be made subject to such regulation in order to minimize point and nonpoint source impacts. The consultant has proposed adoption of regulations pertaining to eight such areas and

activities and has described the Land Use Commission's Model Regulations for each. These eight are:

1. Site selection and construction of major new domestic water and sewage treatment systems and major extensions of existing domestic water and sewage treatment systems.

2. Site selection and development of solid waste disposal sites.

3. Site selection and development of new communities.

4. Mineral resource areas.

5. Natural hazard areas (includes regulations pertaining to floodplains and geological hazards).

6. Historical, natural, and archaeological resource areas of statewide importance (includes regulations pertaining to shorelands of major publicly-owned reservoirs and wildlife habitat areas).

In certain instances, the consultant has included additional water quality considerations in its description of the LUC regulations. This was done to provide suggested means for control of water pollutant sources indigenous to the three lakes area.

While it may be that certain of the regulations are particularly appropriate for adoption by Grand County rather than the Town of Grand Lake (the only entities under study which may adopt such regulations), the Town could benefit from adoption of certain regulations as well. Shoreline regulation and regulation of new sewage and water facilities are examples.

It should be noted that, though H.B. 1041 model regulations are described, that act does not provide the sole source of enabling legislation for the adoption of regulations dealing with hazardous areas and activities. As is stated in the LUC's Guidelines for Identification and Designation Regulations at §106, regulation of hazardous areas may be accomplished under zoning enabling legislation or H.B. 1034, though the LUC intends to insure that the intent of H.B. 1041 is carried out by any such alternative regulation. As a result, Grand County, under §30-28-101 et seq., C.R.S. 1973, and Grand Lake, under §31-23-301 et seq., C.R.S. 1973, might adopt the following regulations under their zoning authority, though certain variations in the regulations might be required to conform to the requirements thereof. Similarly, both might utilize H.B. 1041 as auth-

ority. See §29-20-104, C.R.S. 1973. The models described here would generally be applicable regardless of the source of authority.

1. Site Selection of Major New Domestic Water and Sewage Treatment Facilities.

a. Scope.

The Land Use Commission's Model Regulations define a new domestic sewage treatment facility as one capable of treating the wastewater generated by 20 or more people. §14-102(2). A new domestic water treatment system is defined as a system for the provision of a public water supply which is proposed to serve a population equivalent to 25 single-family dwellings. §14-102(1).

b. Nature of the Review.

After designation by the local government, a permit must be obtained prior to the construction of any major new domestic water and/or major new sewage treatment facilitity. §14-302(1) and §14-302(2). The application for such permit is required to include detailed plans and specifications for construction, a demonstration of need, and an environmental impact analysis. §14-304. The environmental impact analysis must include evidence of conformity with local land use plans and an assessment of impact on surface and groundwater quality and other environmentally-sensitive resources. §14-304(4)(a), (b), and (d).

c. Exemptions.

The regulations dealing with major new water and sewer systems do not apply to major extensions of existing domestic water and sewage treatment facilities. But see §III.J. 2., supra.

d. Criteria for Approval.

The Model Regulations require that the local government make the following findings before approving a new water or sewage treatment system:

1. That the proposed facility does not conflict with adopted local land use plans or with state or federal water plans. §14-306(1)(a).

2. That the proposed facility is needed because existing systems' operational efficiency, state of repair, or level of treatment is such that replacement is warranted.

3. That existing facilities cannot be upgraded or expanded to meet waste discharge permit conditions of the Colorado Water Quality Control Division. §14-306(j).

4. That the proposed facility will not encourage strip development or leapfrog development. §14-306(1).

5. That the proposed facility will not decrease the quality of downstream surface or subsurface water resources below that designated by the Colorado Water Quality Contol Commission. §14-306(1).

It should be remembered that these regulations are in addition to any applicable state or federal water quality requirements.

2. Major Extensions of Existing Domestic Water and Sewage Treatment Facilities.

a. Scope.

Once identified and designated as an activity of state interest, a permit from the local government must be obtained for all proposed major extensions of existing domestic water and sewage treatment systems. §15-104(2). A major extension of an existing sewage treatment system is defined to mean any modification of existing sewage treatment plants to increase hydraulic capacity or upgrade capability, any extension of existing main collector sewer lines, or any extensions to service a population of 20 or more people or the equivalent thereof in other uses. §15-102(3).

b. Nature of the Review.

A permit application must include the results of the preliminary review and comments by the Colorado Department of Natural Resources and the Colorado Department of Health. §15-303(3)(b). Each application is required to include detailed construction plans and specifications, as well as a demonstration of need. §15-304(2) and (4). Permit applications must include an environmental impact analysis which assesses the impact of the proposed facility on water quality. §§15-304(5)(b)(i); 15-304(5)(a) and (x). The application must also include a financial impact analysis, stating whether the major extension capacity exceeds the proposed ten-year population growth needs as detailed by the appropriate region 208 planning demographic projections. If so, the application must detail the excess capacity and the cost of that excess capacity to the community. §15-303(6)(d).

c. Exemptions.

The Model Regulations do not apply to new major domestic water and sewage treatment facilities. But see §III.J.1., supra.

d. Criteria for Approval.

A local government may approve a permit application for a major extension of existing domestic water or sewage treatment facilities which meets, inter alia, the following criteria:

1. Major extensions of domestic water and sweage treatment systems shall be permitted in those areas in which the anticipated growth and development that may occur as a result of such extension can be accommodated within the financial and environmental capacity of the area to sustain such growth and development. §15-304(a).

2. The proposed development does not conflict with an approved local master plan or other applicable regional, state, or federal land use or water plan. §15-304(b).

3. The proposed development does not adversely affect either surface or subsurface water rights of upstream or downstream users. §15-304(c).

4. Adequate water supplies, as determined by the Colorado Department of Health, are available for efficient operational needs. §15-304(d).

5. Existing facilities cannot be upgraded or expanded to meet waste discharge permit conditions of the Colorado Water Quality Control Division. §15-304(j).

6. Such development will not encourage strip development or leapfrog development. §15-304(l).

7. The proposed development will not decrease the quality of peripheral or downstream surface or subsurface water resources below that designated by the Colorado Water Quality Control Division. §15-304(n).

3. Site Selection and Development of Solid Waste Disposal Sites.

a. Scope.

Once solid waste disposal is designated as an activity of state interest, development of a proposed solid waste disposal site must be preceded by a permit therefor obtained from the appropriate local government. §16-302(1) and (2). A solid waste disposal site is defined as a place at which disposal or recycling of solid wastes takes place. §16-102(11).

b. Nature of the Review.

The Model Regulations require the submission of a detailed permit application which must include the following:

1. Construction plans and specifications. §16-305(2)(d).

2. Engineering data. §16-305(2)(k).

3. Geologic data. §16-305(2)(l).

4. Groundwater and hydrological data. §16-305(2)(m).

5. Operational plans. §16-305(2)(q).

c. Exemptions.

The Model Regulations do not apply to dumping of an individual's solid waste on his own property provided such does not constitute a public nuisance and provided such is done in accordance with applicable State Health Department rules and regulations. §16-102(11); *see* §30-20-106, C.R.S. 1973.

d. Criteria for Approval.

Prior to approval of a permit application, a local government must find that the proposed location or development meets, *inter alia*, the following criteria:

1. Site selection and development of a solid waste disposal site shall be consistent with public health and welfare and air and water quality standards and adaptable to appropriate land use plans. §16-306(1)(d).

2. Sound conservation practices shall be followed during the location and development of solid waste disposal sites. §16-306(1)(e).

3. The location and development of a solid waste disposal site be in an area not otherwise provided with a solid waste disposal site, adequate in terms of capability, capacity, environmental protection, conservation practices, cost efficiency, and access. §16-306(1)(f).

4. The site selection, development, and final use of the site shall be in accordance with the adopted master plan in this jurisdiction and any applicable regional and state plans. §16-306(1)(k).

5. The final use of the site shall be compatible with present and planned surrounding land uses. §16-306(1)(l).

6. The final use of the site shall be determined within the physiographic limitations of the site. §16-306(1)(m).

4. Site Selection and Development of New Communities.

a. Scope.

Once "site selection and development of new communities" is designated by the local government as an activity of state interest, all proposed "new communities" must receive a permit from the local government prior to approval. The Model Regulations define three types of new communities, including "new community," "the major revitalization of existing municipalities," and the "establishment of urbanized growth centers in unincorporated areas." §21-102(4)(a) and (b). The Land Use Commission's guidelines suggest that the definition of "new community" may vary widely from jurisdiction to jurisdiction and provides other model definitions as well. See Appendix A to Model Regulations, Chapter 21, p. 21-13. A definition proposed by the Pueblo COG would include the expansion and/or extension of existing sewer service districts which serve a given population or land area as one of the threshold definitional requirements of "new communities." Appendix A, p. 21-14. Boulder County's definition of "new community" includes the formation and expansion of any special district. Appendix A, p. 21-16. A H.B. 1041 "new community" review process would most likely be integrated with existing land use procedures. See Proposed Pueblo Approach, Appendix A, p. 21-18.

b. Nature of the Review.

A permit application must meet detailed submission requirements, including an assessment of impacts upon water quality. §21-304(2)(e)(1).

c. Exemptions.

Those developmental activities which might be exempted from the "new community" permit requirements will vary depending upon the definition of "new community" which is adopted by the local government. In the three lakes area, exemptions should be reviewed to assure that any grant of such will create no water quality hazards in the lakes.

d. Criteria for Approval.

A local government may approve an application for a permit for site location and construction of a "new community" only if the proposed development meets a number of criteria, including the requirement that existing water quality of "affected" waters will not be adversely impacted, unless permitted by law. §21-306(1)(p).

5. Natural Resource Area of Statewide Importance -- Shorelands of Major Publicly-Owned Reservoirs.

See also §III.K., infra.

a. Scope.

Once shorelands are designated as an area of state interest, a permit must be obtained from the local government in order to develop within the designated shorelands of a major publicly-owned reservoir. §9-402(1). The regulations are intended to protect shorelands from floodwaters and to protect publicly-owned reservoirs from destructive shoreline uses and significant degradation of their water quality. §9-101(1) and (2). Shorelands are defined to include all lands extending a minimum of two hundred feet shoreward of the flood protection level and all associated wetlands. §9-102(4). The reservoir floodplain is defined as that area inundated when a one-hundred-year flood is routed through the reservoir. §9-102(5)(a) and (b).

b. Nature of the Review.

The Model Regulations require that any person seeking to develop any area within the shorelands of a major publicly-owned reservoir obtain a H.B. 1041 permit prior to obtaining any other necessary permit, any rezoning, or

instituting any other local governmental action. §9-104(2). The regulations specify certain allowable uses within the reservoir floodplain, §9-301(1) and (2), and prohibit the development of any wetlands of any major publicly-owned reservoir. §9-301(3) and §9-402(3).

A permit application must include data concerning the scope and nature of the proposed development, §9-401(c), and an environmental impact analysis which must assess the potential impact on water quality and environmentally-sensitive factors. §9-404(3)(b)(I) and §9-404(3)(d).

c. Exemptions.

The regulations do not apply to "non-major" reservoirs or to privately-owned reservoirs. See §9-102(3).

d. Criteria for Approval.

A permit application for development of areas within shorelands of a major publicly-owned reservoir may be approved only if a number of criteria, including the following, are met:

1. The proposed development does not conflict with an approved local master plan or other applicable regional, state, or federal land use or water plan.

2. The proposed development will not decrease the quality of peripheral or downstream surface or subsurface water resources below that designated by the Colorado Health Department. §9-406(1)(a) and (d).

6. Mineral Resource Areas.

a. Scope.

Once a mineral resource area is designated as an area of state interest, any person who desires to engage in any development within a mineral resource area must obtain a permit from the local government. §3-201. Mineral resource areas are classified as follows:

1. Mineral resource areas containing only sand, gravel, quarry aggregate, or limestone used for construction purposes. §3-203.

2. Mineral resource areas containing oil and gas or geothermal resources. §3-204.

3. Mineral resource areas containing minerals other than sand, gravel, quarry aggregate, limestone used for construction purposes, oil, gas, or geothermal resources. §3-205.

Within each classification of mineral resource areas, certain permitted, conditionally permitted, and prohibited land uses are delineated. Where insufficient data concerning the type of area involved exist, the local government may designate an area as a natural resource "initial control area." §3-202(2). Such an area is generally larger than an actual H.B. 1041 mineral resource area, since sufficiently accurate data to delineate the mineral resource area precisely do not exist. When an application for development within such an initial control area is received, further studies are conducted, and the area is either classified as one of the natural resource areas defined above or is determined not to be a H.B. 1041 natural resource area. §3-202(3) and (5).

b. Nature of the Review.

Permit applications are required to include detailed mineral development plans as well as a statement of intended compliance with all federal, state, and local requirements. §3-404(1) and §3-404(1)(m).

c. Exemptions.

The regulations do not apply to the extraction of minerals covered by the Colorado Mined Reclamation Act. §34-32-101 et seq., C.R.S. 1973, as amended by H.B. 1065 (1976).

d. Criteria for Approval.

The local government may approve an application for a permit to engage in development of a mineral resource area only if a number of criteria, including the following, are met:

1. The use is an allowable or conditional use within the appropriate mineral resource area classification.

2. Potential health and safety hazards are reasonably mitigated. Express water quality-related standards could also be included, particularly if regulation were accomplished under H.B. 1034. §3-405(1)(c) and (i).

7. Natural Hazard Areas -- Floodplains.

a. Scope.

Once a floodplain is designated by the local government, any person who desires to develop therein must obtain a permit prior to the commencement of any development or building. §6-201(3). Under the LUC's Model Regulations, a floodplain consists of two separate parts, the floodway zone, which is that part of the floodplain subject to deep flooding during a 100-year flood, and the low-hazard zone, in which the water level, during such a flood, will exceed no more than 1-1/2 feet. §6-202 and §6-203. The regulations specify that only certain kinds of development or building may occur in each of those zones. When technical data are unavailable to delineate precisely the boundaries of the floodplain, the local government may designate a flood hazard "initial control area." §6-201. A permit applicant may then be required to perform or finance further studies to determine whether his proposed development lies within a floodway, low-hazard zone, or is without the floodway entirely. §6-201(6).

b. Nature of the Review.

Permit applications must include engineering maps, drawings, data, and plans. §6-403(2), (3), and (4). The permit applications must include an assessment of the impact on and coordination with other communities on the same river system. §6-403(5).

c. Exemptions.

The regulations do not apply to flood control devices or structures. §6-105(2). Limitation of exemptions creating water quality hazards should be considered.

d. Criteria for Approval.

The regulations impose different standards, depending upon whether a proposed development is located within the floodway or the low-hazard zone. §6-202 and §6-203. In general, all development of buildings and structures is discouraged within the floodway zone. Within the low-hazard zone, the regulations seek to assure that the floodplain area will not be increased by construction within that zone and that downstream persons and property will not be injured by the effect of such construction on flood conditions. Water quality safeguards are not included per se, but should be, particularly in regulations adopted pursuant to zoning enabling legislation or H.B. 1034.

8. Natural Hazard Areas -- Geological Hazards.

a. Scope.

Once a geological hazard area is designated by the local government, any person who desires to develop therein must obtain a permit before seeking any other permit, rezoning, or other action by the local government. §4-104(2). Under the LUC's Model Regulations, certain land uses are specified as allowable within designated geological hazard areas. §4-203. Other land uses are prohibited unless techniques to mitigate their impact are employed. §4-204. Specific mitigation techniques are specified for the various kinds of geological hazards, such as landslides, mud flows, and ground subsidence areas. §4-205(1)(b)(d) and (h). If the mitigation techniques are employed, land uses otherwise prohibited may be allowed as conditional uses. §4-205(1). When technical data are unavailable to delineate precisely the boundaries of a geological hazard area, the local government may designate a geological hazard "initial control area." §4-202(2). A permit applicant may then be required to perform or finance further studies to determine whether his proposed development lies within a geological hazard area, or is without a geological hazard area entirely. §4-202(4) and (5).

b. Nature of the Review.

Permit applications must include maps and geological reports describing the geological condition of the area. §4-403(1)(e) and (f). The LUC's Model Regulations also specify additional submission requirements for the various kinds of geological hazards. §4-403(2).

c. Exemptions.

The Regulations do not apply to nonconforming uses in existence on the date the area is designated, but nonconforming uses which are discontinued or destroyed are subject to the Regulations. §4-105(2). Nonconforming uses which are nuisances or which increase the severity of geological hazards are not allowed to continue as nonconforming uses. §4-105(3).

d. Criteria for Approval.

A permit application for development of areas within designated geological hazard areas may be approved only if a number of criteria, including the following, are met:

1. Permitted land uses, including public facilities, which serve such uses must avoid or mitigate

geological hazards at the time of initial construction, using the techniques set forth in the LUC's Model Regulations.

2. Nonconflicting open space uses, such as agriculture, grazing, greenbelt, and recreation, are incorporated into the development plan to the greatest practicable extent.

3. Provision is made for the protection of the long-term health, welfare, and safety of the public from geological hazards to life, property, and associated investments. Express water quality-related standards could also be included, particularly if regulation were accomplished under H.B. 1034. §4-404(b), (e), and (l).

9. Significant Wildlife Habitat.

a. Scope.

Once a significant wildlife habitat has been designated by the local government, any person who desires to develop therein must obtain a permit prior to the commencement of any development activity and prior to any application for rezoning or building permit. §8-301. The term "wildlife" is defined to include fish as well as wild vertebrates. §8-102(5). Significant wildlife habitat means those areas containing or having a significant impact upon those wildlife habitats in which the wildlife species, identified by the Colorado Division of Wildlife, could be endangered by development. §8-102(4). Wildlife habitat is, in turn, defined to mean a geographical area containing those elements of food, water, cover, space, and general welfare in a combination and in quantities adequate to support a species for at least a portion of the year. §8-102(6).

b. Nature of the Review.

Permit applications must be accompanied by copies of maps, reports, and data, including a description of the nature, density, and intensity of the proposed development. §8-304(5). The application must also include a plan of operation which must contain the applicant's analysis of the effects of the proposed development upon wildlife species (identified by the Colorado Division of Wildlife) within the designated wildlife habitat. §8-304(6). The operation plan must demonstrate how the applicant will meet applicable habitat needs and will avoid conflicts with habitat needs. Where conflicts with habitat needs are unavoidable, the applicant must present proposals to minimize the conflicts, including compensation through replacement or enhancement of

habitat or an alternative site. §8-304(6). Habitat needs are set forth in detail in the LUD Model Regulations, and include the following:

1. Production areas (including spawning beds and permanent shallow water for amphibians);

2. Principal feeding areas;

3. Summer range;

4. Winter range;

5. Concentration areas;

6. Shelter areas;

7. Water and minerals (including high quality water for fish, continuous stream flows, and conservation pools in reservoirs, and stable water levels in lakes and reservoirs);

8. Movement corridors;

9. Buffer zones; and

10. Shoreline vegetation.

c. Criteria for Approval.

The local government may approve an application fc a permit to develop within a significant wildlife habitat if all the following criteria are met:

1. The development is compatible with the significant wildlife habitat as designated;

2. The development is designed and will be administered, controlled, and regulated to allow man to function in harmony with, rather than be destructive to, the significant wildlife habitat as designated;

3. The applicant has presented and is capable of administering a program to meet the specific habitat needs of species identified by the Division of Wildlife of the Department of Natural Resources within the significant wildlife habitat as designated.

4. The development has been approved by the Division of Wildlife of the Department of Natural Resources.

K. Shoreline Protection Regulations.

Protection of shorelines has been described in §III.B. and §III.J., as well as in §II.A.3.c.(2), supra. The following model regulations, taken from the EPA volume on Performance Controls for Sensitive Lands are included as alternatives for this important topic. Authority therefor can be found at §30-28-101 et seq.; §31-23-301 et seq.; §29-20-104; and §24-65.1-101 et seq., C.R.S. 1973. The model regulations proposed in the EPA volume are of two types:

1. Stream and shoreline setbacks and buffer zones.

2. Shoreline management plans.

1. Stream and Shoreline Setbacks and Buffer Zones.

a. Scope and Nature of Review.

The setback and buffer zone regulations provided in the EPA volume establish a buffer zone or setback which may be established as a fixed boundary at a specified distance from the shoreline or as a floating buffer zone in which the width of the zone may vary in accordance with soils, vegetation, slope, and erosion potential of the shoreline areas.

b. Performance Standards and Review Criteria.

Once the boundaries of a shoreline zone are delineated, the allowed, prohibited, and special or conditional uses within the buffer zone are specified. Some regulations provide that the number of allowed or permitted uses may increase as the distance from the shoreline increases. This should be the case only if water quality is not injured thereby. Additional restrictions on land development activities within the zone, such as prohibitions or restrictions on dredging, filling, or dumping, might also apply. Indeed, a local government might consider coordinating its dredge and fill requirements and standards with those of the Corps of Engineers. See 40 F.R. 31320, July 25, 1975. Special setbacks could be incorporated to deal with special activities or developments, such as septic systems, parking lots, and other activities involving significant construction-related land and soil disturbances.

2. Shoreline Management Plans.

a. Scope and Method of Review.

The EPA volume discusses certain state-mandated water resource management systems at pages 15-16 and 118-121.

Such programs exist in the states of Wisconsin, under the Wisconsin State Water Resources Act of 1965, and Washington, under the Washington Shoreline Management Act of 1971. Both states' laws require local agencies to develop and adopt regulatory programs for the protection of shorelines, streams, and other water resource areas. In Colorado, H.B. 1041 allows for the special regulation of "shorelands of major publicly-owned reservoirs." See §III.J., supra.

Local governments in Colorado could employ techniques used in state-mandated local management plans under traditional zoning authority, under H.B. 1041, and under H.B. 1034. Local management plans typically include erosion control and water quality considerations, as well as floodplain regulations. Those local plans frequently employ buffer zones, setbacks, and restrictions on the removal of natural vegetation in order to protect shoreline and stream resources. For example, the Wisconsin act requires a one-hundred-foot setback for septic systems and prohibits certain uses on steep slopes and wet soils. The zoning regulations should also include submission requirements and specify standards for each zone. Requirements and standards may vary from zone to zone.

L. Campground and Recreational Area Regulations.

The engineering consultant has identified campgrounds as a significant source of nonpoint source water pollution in the three lakes region. See §I.B., supra. A suggested ordinance for the regulation of new camping areas is proposed herein. Because of the nature of campgrounds, the authority for the regulation thereof is probably more limited than for other types of development. Such can be found, however, at §30-28-111, 113; §31-23-301, 302, 303, 304; and §29-20-104, C.R.S. 1973. In addition, it may be possible to regulate campgrounds as subdivisions in counties, see §30-28-101(10), C.R.S. 1973, and in municipalities. §31-23-212, 213, 214, C.R.S. 1973. Generally applicable erosion, drainage, and sedimentation control regulations would also apply to campgrounds. Similar regulations should be considered by federal agencies within the region, which sponsor such recreational uses.

1. Scope.

Campground and recreational area regulations establish standards governing the provision of utilities and other facilities within such areas. They should also regulate the use of such areas in order to insure that they are safe, sanitary, and fit for human use. In general, such regulations are normally applied in camping areas, recreational

areas, such as picnic grounds, and in transient mobile home parks. The latter are defined as parcels of land designed to accommodate two or more mobile homes and/or camping units for short-term dwelling purposes (e.g., ninety days or less), whether or not any charge for services is made.

2. Nature of the Review.

A permit must be obtained prior to construction or operation of any transient mobile home park or campground. Permit applications must be accompanied by detailed site plans, including plans and specifications for water supply, sewage disposal, construction of buildings and improvements, landscaping, screening, roads and sidewalks, grading, drainage, and erosion control plans.

3. Exemptions.

The regulations would not apply to mobile home parks or to individual mobile homes located on individual lots, which would be covered by separate regulations.

4. Performance Standards.

a. State Health Department Regulations.

The Colorado Department of Health adopted Standards and Regulations for Campgrounds and Recreation Areas on February 19, 1975. The state health regulations set minimum standards for various types of recreational sites relating to the following matters:

1. Roads, parking, walks;
2. Camp sites, densities, and spacing;
3. Water supply;
4. Sewage collection and plumbing;
5. Refuse disposal;
6. Fire, cooking, and eating facilities;
7. Sanitary facilities;
8. Service buildings;
9. Privies;
10. Safety;
11. Operational responsibility.

Minimum standards for drainage, erosion control, sedimentation, and other nonpoint water pollution sources should also be included.

b. General Zoning Requirements.

The Town of Fleming, Colorado, has adopted specific zoning requirements regarding transient mobile home parks

and campgrounds. The regulations set specific standards concerning the following matters:

1. Site selection;
2. Density;
3. Setbacks;
4. Access and roadways;
5. Lighting;
6. Open space and recreational areas;
7. Service buildings;
8. Fire protection;
9. Maximum term of residency;
10. Utilities:
    a. Water;
    b. Sewage;
    c. Electricity;
    d. Refuse disposal;
11. Registration of occupants;
12. Licensing of operators.

Once again, standards relating to nonpoint water pollution sources should be added.

c. Review Standards.

Review standards prohibiting the construction or development of any campground which will create point or nonpoint sources of water pollution should be adopted.

M. Litter Control Regulations.

The engineering consultant has identified "urbanization" as a source of nonpoint water pollutants and suggested improved urban cleanliness as a technique by which to ameliorate that source. See §I.B., supra. One technique by which urban cleanliness may be improved is through a stringent litter regulation prohibiting the depositing of litter or other solid waste except at designated disposal sites. It would appear that counties and municipalities may adopt litter control regulations. Counties may prohibit the dumping of solid waste, as defined at §30-20-101(6), C.R.S. 1973, at any but designated sites. §30-20-101 et seq., C.R.S. 1973; see §30-20-106, C.R.S. 1973. County health departments and boards of health have additional powers which appear to permit the adoption of litter control regulations. §25-1-506, 507, C.R.S. 1973. Municipalities are generally authorized to adopt necessary health-related ordinances. §31-15-401(1)(a), (b), (c), C.R.S. 1973. Home rule may also provide additional power therefor. Municipalities may be able to benefit from the provisions of §31-15-710, C.R.S. 1973, which provide certain limited authority to prevent water pollution. Finally, it may also be arguable

that H.B. 1034, at §29-20-104, C.R.S. 1973, provides authority for both counties and municipalities to adopt litter control regulations. The State of South Dakota has adopted a litter control statute which provides a helpful model for this proposed regulation. See §34-16C-101 et seq., S.D.C.L. 1967.

1. Scope.

The first step in controlling litter is to define that term. Such should be defined broadly to include all forms of refuse, garbage, and waste materials derived from any source. Municipalities, and possibly counties, may be able to use existing enabling legislation to regulate the depositing of nonsolid waste, as well as solid waste, and to include such within the definition of litter. Such could prove helpful in controlling oil and grease from boats and other nonsolid waste.

2. General Regulatory Approach.

Using the South Dakota statute as a basis, the following restrictions on the depositing of litter are suggested:

1. A requirement that public or quasi-public facilities provide waste receptacles.

2. A prohibition against the dumping of litter from any car, boat, or other vehicle.

3. A prohibition against the dumping of litter except at designated sites.

4. A prohibition against the accummulation of litter in such a way that it may be carried by any natural forces from the place of deposit.

Penalties for the unlawful depositing of litter must be provided. Both civil and criminal sanctions should be considered.

3. Exemptions.

The Colorado Solid Waste Disposal Act, which is cited above as authority for county litter control, exempts the dumping of one's own solid waste on one's own property, so long as such constitutes no public nuisance and complies with Colorado Health Department regulations. §30-28-106, C.R.S. 1973.

N. Regulation of Sources from Marinas and Boats.

The engineering consultant has identified washing of boats, docks, and marina areas, as well as operation of boats, as potential contributors of oil, grease, untreated sewage, and other pollutants to the lakes. §I.B., supra. While some control over runoff from washing of docks and other marina areas at least can be obtained through local drainage regulations, it would seem that the above-named sources would be better subject to control by state agencies.

Pollutant sources contributed from the operation of boats are point sources subject to regulation by the Water Pollution Control Division of the State Health Department. Section 25-8-103(10), C.R.S. 1973, defines "point source" as:

> ". . . any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged." (emphasis supplied)

The discharge of any "point source" must be made in accordance with a discharge permit obtained from the Division. Discharges of pollutants in the absence of a permit are unlawful and may be prevented by the Division. That the Division intends to control sources of pollutants from boats is indicated by the fact that it has adopted the above definition in its Combined Regulations for Agricultural and Non-Agricultural Activities. It might also be noted that the Colorado Department of Game, Fish and Parks also has adopted Land and Water Use Regulations which prohibit the operation of boats having unsealed sewage systems or the discharge of wastes and garbage into state waters. These regulations, effective on January 1, 1977, are probably of little use to the instant problem, however, since they are applied only on waters within the Department's jurisdiction. None of the three lakes is included within the Department's control.

Sources emanating from the washing of docks or boats are also probably best subject to control by the Division. The definition of "point source" stated above is broad enough to include pollutant sources arising from those activities. Minor regulation, as noted above, might also be accomplished under County or Grand Lake drainage regula-

tions. Federal agencies might also perform certain similar functions at boat launching areas within their jurisdiction.

O. Regulation of Existing Development.

While recognizing the need for zoning, subdivision, and other land use regulations to control the point and nonpoint water quality impacts of proposed development, Grand County officials have expressed concern about their ability to control water quality impacts of existing development and of approved and undeveloped or partially developed subdivisions. This concern was expressed by the County Commissioners and by the County Attorney at the consultant's meeting with them on November 1, 1976, and was also expressed by County Manager Stan Broome in a letter of November 24, 1976. Specifically, while the County officials feel that they are empowered to regulate new construction, urbanization, mining, or other sources of water pollution, they are uncertain whether they can regulate those same sources where they already exist as a result of prior development or where they may result from development of lots in subdivisions approved under prior, less restrictive County regulations which were not designed to assure that development would not create sources of water pollution. The consultant has investigated this problem and has concluded that certain control over such sources can be obtained through use of the following techniques:

1. Building permit regulation.
2. Regulation of nonconforming uses.
3. Nuisance regulation.
4. Adoption of certain H.B. 1041 regulations.
5. Adoption of H.B. 1034 regulations.

Each of these techniques will be discussed below, and potential problems associated with their use will be identified.

Prior to discussing the use of the above techniques, a few comments should be made. The regulation of water quality impacts created by existing development or development approved under prior versions of the subdivision regulations or County platting regulations is largely untested in Colorado. While the consultant has offered as suggested techniques only those which it has concluded are lawful under existing Colorado statutes and case law, the novelty of the suggested techniques mandates that any specific proposed regulation based upon these suggestions be carefully reviewed to assure that it is in fact valid. To assure that a particular regulation is valid, the County must devise regulations which:

1. Have as their purpose the regulation of an identifiable water quality hazard to the public health, safety, or welfare, and which

2. Serve as a reasonable means of regulating a land use in order to aid in controlling that problem.

If the County can show that the purpose of its regulation of existing or approved development does attempt to control such a hazard and that the hazard can be ameliorated by reasonable regulation, its regulation, subject to certain limits, should be upheld despite the novelty of a particular approach.

It should also be noted that implicit in the suggestion of techniques for regulating development approved under prior subdivision regulations or platting regulations is the assumption that such proposed developments cannot now be subjected to existing subdivision regulations. While this appears to be an accurate assumption, there may be at least one method for obtaining subdivision review at this date. See §P.5., infra.

Finally, it should be noted that, since the question under discussion was asked only by officials of Grand County, the consultant has limited its review of the issue to determine what authority Grand County may have to control the above-described problems. Enabling legislation for the other entities involved, except as it may overlap that for counties, is not discussed.

1. Regulation Through Use of Building Permits.

It appears that reasonable regulation of development in an approved but undeveloped or partially developed subdivision could be accomplished through the use of a building permit regulatory system. Under such a system, no building permit to construct in an approved subdivision would be granted unless an applicant therefor could demonstrate that such construction would not degrade the water quality of the lakes or tributaries thereto. The regulations could require the applicant to submit certain materials, including plans and other information, sufficient to show that all drainage, erosion control, grading, sedimentation control, landscaping, and sewage disposal problems would be successfully controlled. No building permit would be issued if the proposed construction would contribute point or nonpoint sources of water pollution to the lakes. Standards for the submission of such information and the review thereof would be included in the regulation. It would appear that such a regulatory scheme is lawful under both the zoning and building code enabling legislation.

a. Regulation Through Zoning.

(1) Enabling Legislation.

Under §30-28-114, C.R.S. 1973:

> "The board of county commissioners may provide for the enforcement of the zoning regulations by means of the withholding of building permits . . . After the establishment of such position and the filing of the same, it shall be unlawful to erect, construct, reconstruct, alter, or change the use of any building or other structure within the unincorporated territory covered by such zoning regulations without obtaining a building permit from such county building inspector. [The] building inspector shall not issue any permit unless the plans for the proposed erection, construction, reconstruction, alteration, or use fully conform to all zoning regulations then in effect." (emphasis supplied)

This section permits the enforcement of currently effective zoning regulations by means of a permit system. Permits for the erection, construction, alteration, or change of use of any building or structure within the County must be obtained before any such activity is undertaken. On this authority, a county could include in its zoning regulations certain water quality-related criteria which would be required to be met prior to the issuance of any building permit. These criteria could be included in the zoning regulation itself, or the zoning regulation could require that standards and restrictions in other existing regulations be met prior to issuance of a building permit. (For example, the zoning regulation might require that a grading permit be obtained under an existing grading regulation prior to issuance of any building permit.) The building inspector, as the official in charge of the building permit system, §30-28-114, would grant or deny such permits after taking steps to insure that all zoning requirements were met. The regulations would, of course, be applied on a lot-by-lot basis, since they would be designed to control lot development in existing subdivisions.

(2) Potential Difficulties.

(a) Definition of Terms "Buildings" and "Structures".

There do exist certain difficulties with the foregoing approach. First, §30-28-114 permits regulation of "buildings or structures." The zoning enabling legislation fails

to define these terms. If they are intended to include only such construction as has four walls and a roof, regulation of numerous land-disturbing activities, such as construction of parking areas, driveways, fences, and similar improvements might be excluded from regulation. This would interfere with the effectiveness of such regulations. It is probably likely, however, that those terms should not be so narrowly defined. As stated in §30-28-111, C.R.S. 1973, zoning regulations may regulate ". . . the location of buildings and structures for trade, industry, residence, recreation, public activities, or other purposes, and the uses of land for trade, industry, recreation or other purposes." (emphasis supplied) This broad authority to control construction and land use provides a wide scope of regulatory power to counties which arguably would be improperly limited by adopting a narrow definition of the terms "buildings or structures." Indeed, our Supreme Court, interpreting a different statute, has approved, in dictum, the holding of a Texas court stating that ". . . the term 'building' [embraces] all useful structures erected by man on land." Based on its approval of the Texas case, the court went on to find that a fence was a building. Parrish v. Hainlen, 124 Colo. 229, 236 P.2d 115 (1951). This broad interpretation is also consistent with the broad authority to regulate land use found in H.B. 1034, §29-20-104, C.R.S. 1973.

Alternatively, it can be argued that the terms "building" and "structure" should be narrowly interpreted. The building code enabling legislation for counties, at §30-28-201, C.R.S. 1973, defines the term "structure" to mean a combination of roof and supporting walls. If that narrow approach is to be applied equally to zoning regulations, then their regulatory scope would be correspondingly limited. Since this definition does not appear in the zoning legislation, however, it would seem improper to extend it thereto. In any case, neither the zoning nor building code enabling legislation so limits the term "building." This may be an indication that it may be broadly defined by counties acting under that legislation.

Even if the terms "buildings" and "structures" are taken to be limited, it can still be argued that the permit for erection thereof may include regulations pertaining to accessory construction related to the erection of a building or structure, such as a parking area. Even under a narrow definition, the County could regulate erection of such areas or other construction under this interpretation. This would, however, exclude regulation of independent "buildings" or "structures" not associated with home or other construction.

It would seem that counties in their zoning regulations can adopt broad definitions of the terms "buildings or structures," permitting them to engage in regulation of all land-disturbing activities in approved subdivisions in which buildings or structures are erected. It should be noted that Grand County has not defined either of these terms in its current zoning regulations.

(b) Impact of Prior Subdivision or Plat Approval.

A more significant difficulty revolves around the interrelationship of prior subdivision approval and future amendments of zoning regulations to control construction in those approved developments. One Colorado decision, relying upon a fact situation extremely unfavorable to the regulating authority, has held that a downzoning of land from a one-half acre to a two-acre density subsequent to approval and substantial development of a subdivision for one-half acre home sites, was unlawful. City of Cherry Hills Village v. Trans-Robles, ____ Colo. ____, 509 P.2d 797 (1973). The court found that the rezoning left no reasonable use for the land and thus that it constituted an unlawful taking. Id. If the County were to amend its zoning resolution and condition the grant of a building permit upon a showing that certain erosion control, sedimentation control, landscaping, grading, and other measures to mitigate point and nonpoint sources have been or will be taken by the permit authority, it might be argued that such an amendment is unlawful under the Trans-Robles rationale due to prior subdivision approval. This argument, however, would likely fail.

It must be remembered that Trans-Robles was decided upon facts very unfavorable to the City of Cherry Hills Village. Indeed, the subdivision, absent housing construction, had been virtually completed prior to the amendment. Sewers, water systems, roads, and utilities had been substantially, if not fully, installed. In addition, the amendment did not seek to establish regulations on a lot-by-lot basis, as would likely be done in any new county regulation, but sought to change the entire nature of the subdivision by amending lot size requirements in a way such that they could not reasonably be met. On such facts, the rezoning was struck down. Similar cases on less extreme facts support the concept of rezoning subsequent to subdivision approval. In State ex rel. Mar-Well, Inc. v. Dodge, 177 N.E.2d 515 (Ohio Ct. App. 1960), a builder sought a permit to construct a house on a platted 100-foot front lot in a zone in which the zoning regulations were amended subsequent to subdivision approval to require a front yard of 150 feet. The reason for the rezoning, interestingly, was to require larger lot sizes due to the discovery that

the lot was in an area with poor leaching qualities for individual sewage disposal systems. The permit was refused and a lawsuit ensued. The court upheld the denial of the permit stating:

> "The legislation changing the zoning requirements of Twinsburg Township was in no sense retroactive legislation. There was no use to which the lands were being put at the time the zoning resolution was changed. Mar-Well Estates was an allotment on paper, without houses or other use. Of course, the change of the zoning requirements prevented the allotters from using the property in the manner contemplated by them, but all zoning laws are based upon the restrictive use of land." (emphasis supplied)

The decision in Grayson v. City of Birmingham, 173 So.2d 67 (Ala. 1967), is also supportive. In that case a plat showing residential and commercial uses, each of which was permitted by existing zoning, was approved by the city planning commission and recorded. Subsequently, the area encompassed by the plat was rezoned to prohibit commercial uses. Prior to the rezoning, over $3,500 worth of lot improvements had been made by the developers. The rezoning was upheld in the face of the developer's challenge. The court stated that, while rights due to subdivision approval and subsequent expense might vest and thus prohibit the rezoning, this was not the case in Grayson. The court said:

> "Here we are dealing with naked lots, which are without structural initiation thereon, no building permit granted, and the owners admittedly have no intention of building on them. The improvements were made only to facilitate their sale and use for business purposes." (emphasis supplied)

See also, Anderson, American Law of Zoning, §19.23; Virginia Construction Corp. v. Fairman, 187 A.2d 1 (N.J. 1962); State v. Bayside Board of Trustees, 108 N.W.2d 288 (Wis. 1961). But see Kryschnski v. Shenkin, 148 A.2d 58 (N.J. 1959); Lengel v. Pirnie, 128 N.Y.S.2d 490 (Sup.Ct. 1954).

The foregoing cases appear to indicate the rezoning of an approved and partially developed subdivision is lawful unless such rezoning renders the land upon which the subdivision is located unusable for any reasonable purpose, as was the case in Trans-Robles. While amending the zoning regulations to include lot-by-lot requirements for the protection of water quality would undeniably stiffen the zoning regulations, such an amendment would be very unlikely to result in a taking of all reasonable uses of the lot,

as might a change in minimum lot size -- though even that change is upheld when reasonable. As a result, an amendment of the county zoning regulations stiffening the requirements for the grant of a building permit would seem valid, although the validity of its application to a particular lot or a particular approved subdivision or platted area would depend upon the facts surrounding the application of the regulations thereto.

This conclusion conforms to general Colorado law regarding zoning amendments. While landowners and the public have the right to rely upon existing zoning in Colorado, Roosevelt v. City of Englewood, 170 Colo. 576, 492 P.2d 65 (1972), that right does not prohibit a zoning amendment when circumstances in an area have changed and when such is necessary to promote the health, safety, and welfare of the public. Holly Development, Inc. v. Board, 140 Colo. 95, 342 P.2d 1032 (1959). That the improvement and protection of water quality are within the public interest is illustrated by the numerous statutes in Colorado which seek to achieve those goals, including the Three Lakes Water and Sanitation District Act itself. Indeed, that a rezoning based largely upon water quality considerations is in the public interest has recently been confirmed by the highest court of the State of Maryland. Norbeck Vil. Joint Venture v. Montgomery County, 254 A.2d 700 (Md. 1969). The consultant would, therefore, conclude that amendment of the zoning regulations to include reasonable water quality-related conditions for building permit regulation is valid and supported by existing decisions.

b. Regulation Under Building Code.

(1) Enabling Legislation.

The Colorado building code enabling legislation for counties provides at §30-28-201, C.R.S. 1973:

> ". . . After the adoption of such building code it shall be unlawful to erect, construct, reconstruct, alter, or remodel any structure, dwelling, or building in the designated area . . . without first obtaining a building permit from such county building inspector. The county building inspector shall not issue any permit unless the plans for such proposed erection, construction, reconstruction, or remodeling fully conform to the regulations and restrictions in the building code."

The same section permits the charging of fees for such permits.

Like the zoning enabling legislation discussed above, this section would appear to authorize the inclusion of certain water quality-related criteria in its building code, which criteria would have to be met by applicants for building permits under the code. Just as in the case of zoning regulations, regulations establishing erosion and sedimentation control requirements, landscaping standards, grading standards, and other similar requirements could be included in the code, or compliance with other existing regulations pertaining to those subjects could be required prior to issuance of any building permit required by the code. Again, the building inspector would administer the system.

(2) Potential Difficulties.

Also like the use of the zoning regulations, use of the building code to accomplish this regulation may present difficulties.

(a) Disadvantages of Building Code Regulation.

It should be noted that in §II.B.6., supra, the consultant noted that regulations such as the kind suggested here are perhaps more proper for inclusion in a subdivision regulation. The consultant does not mean to retract that statement by inclusion of this section. The difficulty is, of course, that regulations seeking to control land use impacts of development in already approved subdivisions are under discussion here. In §II.B.6., we were discussi under discussion here. In §II.B.6., the consultant was discussing regulations applicable to proposed subdivisions. While erosion, grading, and other regulations may be more appropriate in subdivision regulations, they have no usefulness as part of such when it is development in approved subdivisions that is sought to be regulated. This section attempts to find methods of regulation for areas beyond subdivision control.

(b) Other Difficulties.

The initial difficulty surrounding use of the building code to regulate construction in approved subdivisions is definitional. The building code enabling legislation enables counties to regulate the construction and alteration of dwellings, buildings, and structures. §30-28-201, C.R.S. 1973. That section defines only the term "structure." It is defined to mean a combination of roof and supporting walls and columns. The terms "dwelling" and "building" are not defined. Whether they, and particularly the term "building," may be defined so broadly as to include the many types of construction which do not consist of a roof and four

walls or which are not inhabitable is therefore an important question. Based upon the consultant's analysis of this concern with regard to the zoning enabling legislation, see §1.a., supra, it would seem that there at least does exist authority to define the term "building" so broadly as to include improvements such as fences, parking areas, and other noninhabitable structures.

It should be noted that the UBC, 1973, adopted by Grand County as its building code, adopts the following definitions of the terms "building" and "structure":

1. "Building" is any structure used or intended for supporting or sheltering any use or occupancy.

2. "Structure" is that which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

The definition of "structure" is clearly broad enough to permit code regulation of all types of construction activity involving creation of a thing "artificially built up." Broad regulation in approved subdivisions is therefore possible. Whether that definition is within the bounds of the enabling legislation is less certain, since §30-28-201 does define the term "structure" far more narrowly. Perhaps that definition is subject to expansion under the terms of H.B. 1034, §29-20-104, C.R.S. 1973. If not, broad regulatory scope can likely be achieved by expanding the definition of the term "building," which, as noted, is not restricted by §30-28-201.

A second problem with use of the building code as a device to regulate development in approved subdivisions is that building codes have traditionally been envisioned as a means for regulating construction of structural improvements only in order to insure their safety. That regulation of other land-disturbing activities associated with such construction, which activities may create water quality hazards but not hazards to building safety, might be recognized as a valid goal of a building code regulation may be questionable. Because such activities are an inherent part of the construction of homes, offices, parking areas, fences, or any other form of improvement, it is certainly arguable that a building code, by regulating construction or alteration of dwellings, buildings, and structures may be used to regulate those activities. The building code enabling legislation for counties is sufficiently broad to encompass such regulation. The broad language of H.B. 1034 also supports this conclusion by enabling local governments to expand building

code regulation beyond its "traditional" scope. §29-20-104, C.R.S. 1973.

Finally, it was concluded in §1.a., supra, that amendment of the zoning regulation to include or require compliance with grading, drainage, erosion, and similar standards was probably not prohibited by prior subdivision approval, at least when prior subdivision approval was not based upon such requirements. The same conclusion seems accurate with respect to building code regulation. It must always be remembered, however, that if such regulations deprive a landowner of any reasonable use of his land, they will be held to be unconstitutional. The kind of lot-by-lot requirements envisioned herein would not seem to constitute that degree of regulation.

2. Regulation of Nonconforming Uses.

Use of the County's zoning regulations to control the expansion or existence of nonconforming uses may provide a technique by which to regulate existing sources of nonpoint water pollution. Counties have fairly substantial authority to adopt nonconforming use regulations.

a. County Authority Over Nonconforming Uses.

Zoning enabling legislation for counties at §30-28-120, C.R.S. 1973, contains an express authorization permitting counties to regulate nonconforming uses:

> "The lawful use of a building or structure or the lawful use of any land, as existing and lawful at the time of the adoption of a zoning resolution or, in the case of an amendment of a resolution, at the time of such amendment, may be continued, although such use does not conform with the provisions of such resolution or amendment, and such use may be extended throughout the same building if no structural alteration of such building is proposed or made for the purpose of such extension. The board of county commissioners may provide in any zoning resolution for the restoration, reconstruction, extension, or substitution of nonconforming uses upon such terms and conditions as may be set forth in the zoning resolution. The board of county commissioners, in any zoning resolution, may provide for the termination of nonconforming uses, either by specifying the period in which nonconforming uses shall be required to cease or by providing a formula whereby the compulsory termination of a nonconforming use may be so fixed as to allow for the recovery or

amortization of the investment in the nonconformance."

While this statute permits the regulation, and eventual termination, of nonconforming uses, any such regulation must protect the owner's investment in the use as of the time that a zoning resolution or amendment thereto is enacted. Service Oil Co. v. Rhodus, 179 Colo. 335, 500 P.2d 807 (1972). Beyond that fundamental protection, a county is free to regulate a nonconforming use and to bring it into conformity as speedily as is compatible with justice. Wassinger v. Miller, 154 Colo. 61, 388 P.2d 250 (1964). To do so, a county may, in accordance with the statute:

1. Provide for the restoration, reconstruction, extension, or substitution of nonconforming uses upon terms and conditions set forth in the zoning regulations.

2. Terminate nonconforming uses. Termination following abandonment of a use, Bezedes v. Board, 116 Colo. 123, 178 P.2d 950 (1947), destruction of a use, Service Oil Co. v. Rhodus, supra, and discontinuance of a use, Fishman v. Tupps, 127 Colo. 463, 257 P.2d 579 (1953), have each been upheld in Colorado. Termination after a reasonable amortization period or after a reasonable period of time is, of course, expressly within the terms of §30-28-120.

The foregoing may provide a means by which to regulate existing uses which create water quality hazards to the lakes.

b. Proposed Regulatory Scheme.

If the county is willing to perform a comprehensive amendment of its zoning regulations, as suggested in §II.B., supra, to require that no use be permitted, either as of right or by special use permit, unless it can be demonstrated that such use will contribute or cause the contribution of no point or nonpoint sources of water pollution in the three lakes, then it can be stated that any use so doing fails to conform to the existing zoning requirements. Such nonconforming uses could then be regulated pursuant to §30-28-120 and applicable case law presented above. Nonconforming uses could be terminated, within the restrictions of that section and the constitution, where no other remedy would prevent continued contribution of pollutant sources. In addition, it appears that §30-28-120 permits the County to adopt less harsh methods of regulating such uses when termination may be undesirable or unnecessary. For example,

authority of the County to provide for reconstruction of nonconforming uses under terms and conditions would seem to permit the County to require the modernization or restructuring of a use so that it would be in conformity with existing regulations. Under that authority, the owner of a contributing parking area might be required to install proper drainage facilities to alleviate sources of water pollution. Once again, all such regulation would be required to protect an owner's investment in his property as existed on the date of the amendment.

While it appears that nonconforming use regulation as a means of preventing degradation of the lakes' water quality is lawful, it should be noted that such a use of that technique would be novel. Traditionally, it has been the use itself, for example a gasoline station in a residential zone or an industrial use in an agricultural zone, rather than the effect of the use, which has created nonconformity. The regulations proposed herein define nonconformity on the basis of the result of a use. Thus, while a gasoline station might be lawful in a commercial zone if it creates no water quality hazard, it becomes nonconforming if and when it does. Because this approach is a novel one, any proposed County regulation of such a nonconforming use should be carefully reviewed to assure that it is valid. It would seem that such regulation is entirely lawful in concept as a form of impact regulation. See §30-28-111, 113, 120, C.R.S. 1973; and see especially §29-20-104, C.R.S. 1973.

3. Nuisance and Health Regulations.

If authority to adopt such regulations exists on behalf of counties, nuisance regulation may provide an effective means for controlling sources of water pollution from existing development. To a lesser extent, it might also aid in controlling sources from ongoing development or development in approved areas. County health regulations may be similarly useful.

a. County Authority.

It is questionable whether a county in Colorado may exercise nuisance authority. Several lines of authority may provide it.

(1) Case Law.

Generally a county, as a political subdivision of the state, may exercise only those powers which have been expressly delegated to it, which may be implied therefrom, or which are reasonably necessary to the proper exercise of its express authority. Farnik v. Board, 139 Colo. 481, 341

P.2d 467 (1959). This general rule also would seem to include the specific authority to regulate nuisances. See Northwest Fertilizin, Co. v. Village, 124 Sup.Ct. 1036 (1878); Annotation 65 A.L.R. 702, 36 A.J.2d Municipal Corp., Counties, etc., §443. A review of the general enabling legislation for counties appears to indicate that Colorado counties were not intended to have general police power authority to abate nuisances. See §30-1-101 et seq., C.R.S. 1973. Despite the apparent absence of enabling legislation, it has been held by the Colorado Supreme Court that counties have the authority, through their sheriffs, summarily, and without resort to legal proceedings, to act to abate nuisances. Gaskins v. People, 84 Colo. 582, 272 P. 662 (1928). It would seem that the Gaskins decision permits nuisance abatement by a county even in the absence of statutory authority to do so, perhaps on the basis of some common-law authority, though the theory of the case is uncertain. Although this would make Colorado the exception rather than the rule, there does exist recent authority in another jurisdiction supporting this "exception." See Cox v. New Castle County, 265 A.2d 26 (Del. 1970), in which it was held that a county, as a legally-created public authority, may sue for relief from a public nuisance.

Even if the Gaskins case creates an exception to the general rule, it may be a limited one. Gaskins dealt with summary abatement of a public nuisance. It has been held in Colorado that only a nuisance per se, that is, a nuisance which at all times and under all circumstances is a nuisance, Echave v. City of Grand Junction, 118 Colo. 165, 193 P.2d 277 (1968), may be summarily abated. Denver v. Mullen, 7 Colo. 345, 3 P. 693 (1884); Echave v. City of Grand Junction, supra. All other nuisances, that is, those which arise only due to their circumstances, must be abated by judicial process. This distinction is more than academic, since most contributors of water pollutants which the County might seek to regulate as nuisances will likely not be nuisances per se. It may be that Gaskins permits only summary abatement of nuisances per se. All others would be abated by judicial recourse through the district attorney. It may, of course, be argued, and the language of Gaskins provides some support for this proposition, that the authority to summarily abate nuisances certainly includes the authority to abate them by judicial recourse, as was permitted in the Cox decision. An Oklahoma case has held, however, that a grant of power to summarily abate nuisances does not confer upon a municipality the authority to abate them by judicial process. Billings Hotel Co. v. City, 154 P. 557 (Okla. 1916). Whether that rule would govern in Colorado is uncertain. That case did, however, rely solely upon statutorily-delegated authority, which Gaskins did not.

If existing case law permits a county to abate a nuisance, what may it abate? The cases define "public nuisance" as: "the doing of or failure to do something that injuriously affects the safety, health, or morals of the public, or works some substantial annoyance, inconvenience, or injury to the public. 39 Am.Jur., 285; 46 C.J. 646; 1 Wood on Nuisances, 3d Ed., 34;" Echave, supra. This definition seems broad enough to regulate many discharges or other sources, point or nonpoint, which degrade the water quality of the lakes. Indeed, water pollution has been held to be a nuisance. Illinois v. City of Milwaukee, 406 U.S. 91, 92 S.Ct. 1385 (1972). As a result, if a county is empowered to abate nuisances, summarily, judicially, or both, it seems authorized to abate activities which create sources of water pollution in the lakes. At the risk of being redundant, it should be reiterated that the above rule may be able to be invoked by counties only when a nuisance is a nuisance per se, as defined above.

While the foregoing may provide the County with authority to abate nuisances, it is probably unlikely that it provides the County with authority to adopt a nuisance regulation. To do such would almost certainly seem to require clear enabling legislation. The foregoing does not constitute such, and probably permits nuisance abatement on a case-by-case basis when an activity falls within the above definitions. Authority to adopt an actual nuisance regulation must be found elsewhere.

(2) Enabling Legislation.

(a) County Health Statutes.

County health departments are authorized to abate nuisances "when necessary for the purpose of eliminating sources of epidemic and communicable diseases affecting the public health." §25-1-506(1)(e), C.R.S. 1973. This appears to be the only general nuisance power provided for county health departments. County health departments are also enabled to carry out health programs necessary or desirable for the public health, §25-1-506(1)(h), C.R.S. 1973, and to initiate sanitary and health investigations. §25-1-506(1)(j), C.R.S. 1973. Finally, health departments may administer and enforce laws, rules, and regulations pertaining to water quality control. §25-1-506(1)(a), C.R.S. 1973. Grand County has no health department, only a board of health and a health officer.

County boards of health possess extensive authority to abate nuisances and to exercise other health-related authority. Section 25-1-611, C.R.S. 1973, states:

> "The board of health shall make such regulations respecting nuisances, sources of filth, and causes of sickness within its respective limits and on board any car or train of cars as it shall judge necessary for the public health and safety. Any person who violates any such regulations, upon conviction thereof, shall be punished by a fine of not more than one hundred dollars."

Section 25-1-613 states:

> "The board of health shall examine all nuisances, sources of filth, and causes of sickness, which, in its opinion, may be injurious to the health of the inhabitants, within its town, city, or county or in any car or train of cars within said town, city, or county, and it shall destroy, remove, or prevent the same as the case may require."

The board may also regulate privies and water closets, §25-1-614, C.R.S. 1973 (see also §25-10-101 et seq., C.R.S. 1973, and County Individual Sewage Disposal Regulations), and unhealthy cellars, vaults, lots, sewers, drains, places, or premises. §25-1-615, C.R.S. 1973. The board may order nuisances on private property removed, §25-1-617, or, if the order is ignored, remove the nuisance itself, §25-1-618, at the expense of the person creating the nuisance. §25-1-616. One who is convicted of maintaining a nuisance injurious to the public health may be ordered by a court to abate or remove the same. §25-1-619.

The foregoing permits local boards of health to adopt regulations respecting nuisances, sources of filth, and causes of sickness, and to remove them when they occur. Clearly, summary abatement (limited to nuisances per se, see Denver v. Mullen, supra) is contemplated, and it seems that abatement by judicial process is also available to a county board of health under §25-1-619, thereby permitting abatement of nuisances which may not be nuisances per se. This authority is quite broad. It would seem to permit the adoption of regulations or a program of regulation to abate sources of water pollution to the lakes by summary or judicial action. Admittedly, adoption of such a program might be a novel idea, but it seems to be within the intent of the enabling legislation.

In addition to its nuisance authority, a board of health is empowered:

> "1. To determine general policies to be followed by the public health officer in administering and enforcing the public health laws, the orders,

rules, and regulations of the board, and the orders, rules, regulations, and standards of the state board of health;

***

"2. To issue such orders and to adopt such rules and regulations, not inconsistent with the public health laws of this state nor with the orders, rules, and regulations of the state board of health, as the board may deem necessary for the proper exercise of the powers and duties vested in or imposed upon a department or board of health by [the health enabling legislation]."

A county health officer may:

"1. Administer and enforce the public health laws of the state of Colorado; the orders, rules, regulations, and standards of the state board of health; and the orders, rules, and regulations of the county or district board of health;

"2. Exercise all powers and duties conferred and imposed upon departments not expressly delegated to county or district boards of health by the provisions of [the county health enabling legislation]."

Two types of authority are discussed above. The first is authority to adopt nuisance regulations. It appears that health departments, to a limited extent, and health boards are authorized to regulate and abate nuisances within a county. It has been noted that water pollution has been held to be a nuisance in the past. While county regulation might comprehend more sophisticated regulation of novel sources of water contamination than those found subject to abatement in past cases, it seems that the enabling legislation for boards of health, and to a lesser degree of health departments, authorizes a regulatory program to control water pollution as a nuisance so long as it can be shown that water pollution injures the public health.

Local health departments are also authorized to adopt policies, rules, and regulations necessary to protect the public health. These statutes may also authorize the adoption of regulatory programs designed to control the impacts of water pollution on the public health. Because effective land use regulation can also accomplish this objective, it may be that such programs are not as necessary as one designed to regulate nuisances.

(b) Other Legislation.

(i) Solid Waste Disposal.

Counties are authorized to regulate the improper dumping of solid waste. §30-20-101 et seq., C.R.S. 1973. Solid waste is defined to mean garbage, refuse, sewage, sludge, and other discarded materials, excluding agricultural waste. All dumping of solid waste, except one's own waste on his own property, must be done at an authorized solid waste disposal site. §30-20-106, C.R.S. 1973. Even dumping of waste on one's own property may be prohibited if it is found to be a public nuisance under rules and regulations of the local health department. Id. An improperly maintained disposal site is also a nuisance. §30-20-113, C.R.S. 1973.

The Solid Waste Disposal Act provides an effective means for dealing with the disposal of solid waste. The broad definition of that term provides a broad regulatory scope for control of that activity. Under rules and regulations adopted by county health officials, dumping on one's own land rising to the status of a public nuisance may be abated. If degradation of water quality is a public nuisance, then improper dumping which causes such may be controlled under this act. It should be noted, of course, that the act applies to solid waste only and does not regulate the dumping of liquid waste.

(ii) Individual Sewage Disposal.

Regulation of individual sewage disposal is permitted under §25-10-101 et seq., C.R.S. 1973. The County regulations pertaining to such are discussed in §II.B., supra.

(iii) State Criminal Code.

The state's criminal code declares and provides for the abatement of certain nuisances. §16-13-301 et seq., C.R.S. 1973. Section 16-13-302 provides:

> "It is the policy of the general assembly that every public nuisance shall be restrained, prevented, abated, and perpetually enjoined. It is the duty of the district attorney in each judicial district of this state to bring and maintain an action, pursuant to the provisions of this part 3, to restrain, prevent, abate, and perpetually enjoin any such public nuisance."

The statutes go on to define four classes of nuisances. Included at §16-13-305(1)(e), C.R.S. 1973, as a class three nuisance is the following:

> "Any unlawful pollution or contamination of any surface or subsurface waters in this state, or of the air, or any water, substance, or material intended for human consumption, but no action shall be brought under this paragraph if the state department of health or any other agencies of state or local government charged by and acting pursuant to statute or duly adopted regulation has assumed jurisdiction by the institution of proceedings on that pollution or contamination."

Although enforcement of this statute is the responsibility of the District Attorney for Grand County, and not the County acting through its Commissioners or County Attorney, it can be of some assistance herein. The statute does provide a clear and authoritative prohibition of water pollution, based upon a nuisance theory. While the County itself cannot enforce the prohibition, it can and should urge the District Attorney for the County to do so. In addition, the statute establishes that water pollution may be a nuisance and lends credence to potential local nuisance regulation thereof, as appears valid under the above-discussed cases and statutes. The statute is not intended to supersede such alternative regulation. §16-13-305(1)(e), C.R.S. 1973.

b. Proposed Regulatory Scheme.

The type of regulations which a county might adopt would depend upon which authority was used. In all cases, however, it is envisioned that the emphasis of the regulation would be on control of sources from existing development and, to a lesser extent, control of sources from ongoing development.

On the basis of the above, it would seem that nuisance regulations probably would be adopted by the local board of health. Such would seek to control sources of water pollution from existing development. Land use regulations discussed in prior sections should be designed to control sources which may arise from proposed development or development in approved subdivisions. By proposing such a use of the nuisance power, it is not intended to imply that nonconforming use regulation, discussed above, should not also be employed. Nuisance regulations would seek to control any activity which was, at the time of application of the regulations, contributing a nonpoint or point source of water

pollution to the lakes or any tributary thereto. It might prove helpful to adopt definitions of the terms "point" and "nonpoint" sources of water pollution within the regulation in order to define its scope. If desired, certain activities, when contributing pollutants, might be stated to be nuisances. For example, runoff from a gas station parking area might be contributing sources of grease or oil to the lakes. Grease and oil could be defined as water pollutants, and the operation of a gas station in a fashion which contributes the same to the lakes could be regulated as a nuisance. Abatement by any satisfactory technique could then be required. Similar control of other activities could be had.

Nuisance regulation should be a technique of last resort. Whenever possible, the alleviation of nuisance effects should be planned for and controlled in advance of their occurrence.

Nuisance regulation might also serve as a means of regulating pollutant sources arising from ongoing development. This might be done more effectively through the use of zoning, subdivision, grading, erosion control, and other land use regulations.

Finally, regulation of the improper deposit of solid waste should also be regulated when such constitutes a public nuisance. Regulations may be adopted. The widest possible regulation of pollutants emanating from existing or future improper dumping is suggested. A broad regulatory scheme based on the Solid Waste Disposal Act could succeed in eliminating many sources of water pollution.

Nuisances might also be attacked through use of the criminal statutes cited in (iii), supra. The County can clearly do no more than urge the responsible District Attorney to enforce those proscriptions.

4. Regulation Under H.B. 1041.

H.B. 1041, codified as §24-65.1-101 et seq., C.R.S. 1973, authorizes local governments to designate and regulate development in certain hazardous areas and with respect to certain activities of state interest. In order to develop in such an area or with respect to such an activity once designated by a local government as a matter of state interest, a person must obtain a permit to do so from the responsible local government. §24-65.1-501. H.B. 1041 provides a form of regulation separate and distinct from zoning, subdivision, or other local land use regulation. As a result, this technique could be utilized to regulate development in approved but undeveloped or partially-devel-

oped subdivisions. In addition to all other forms of local approval, a person wishing to erect a house on a platted lot would need to obtain a H.B. 1041 permit. To do so, he would be required to meet the standards established by the local regulations pertaining thereto. §24-65.1-501(3), C.R.S. 1973. By including water quality considerations in these regulations, the County could obtain a regulatory handle on important matters which may have been missed by prior subdivision approval.

H.B. 1041 establishes twenty-one areas and activities of state interest. Those which pertain particularly to water quality and/or development of new subdivisions or other new communities might be useful to regulate the water quality impacts of approved subdivisions. The following appear to be applicable:

1. Natural hazard areas, including floodplains and geological hazards. §24-65.1-201(1)(b), C.R.S. 1973.

2. Areas containing or significantly impacting historical, natural, or archaeological resources, including shoreline areas and significant wildlife habitats. §24-65.1-201(1)(c), C.R.S. 1973.

3. Site selection and development of new communities. §24-65.1-203(1)(g), C.R.S. 1973.

4. Site selection and construction of new domestic water and sewage treatment facilities and major extensions thereof. §24-65.1-203(1)(a), C.R.S. 1973.

The Model Regulations of the Land Use Commission for each of these, along with other matters not appropriate to regulation of approved subdivisions, were described in §III.J., supra. As was suggested therein, certain additions to those models would be advisable to assure that drainage, erosion, sedimentation, and other point or nonpoint source problems were controlled.

The usefulness of any particular matter described above is, of course, limited by the appropriativeness of its use in any specified area. For example, while development in a geological hazard area is regulable to control the water quality impacts of such, such an area can be designated only if real geological hazards exist. If no approved subdivision lies on top of such, then the usefulness of that particular area is lost. The same can be said for floodplains or other areas. Similarly, unless a subdivision meets the H.B. 1041 definition of a "new community," see §24-65.1-104(13),

C.R.S. 1973, designation of that matter even for the entire county will be of no use in regulating that particular subdivision. Alternatively, it may be that the County is aware of certain hazardous areas and activities within the County which are not mentioned herein but which might prove to present a useful regulatory basis under H.B. 1041. If so, these should be designated.

H.B. 1041 does present one potential problem to using designation of matters of state interest as a device to regulate development in approved subdivisions. Section 24-65.1-107(1)(c)(III) exempts from the definition of subdivision land "with respect to which a development plan has been conditionally or finally approved by the appropriate local government." This section may exempt all approved subdivisions or even areas merely platted prior to adoption of subdivision regulations. The Land Use Commission's Model Regulations severely limit this section. At §1-105(5) of the Model Regulations is found the Commission's interpretation of the cited section of H.B. 1041. It exempts approved development only if:

> "The specific development or activity is on land with respect to which a final plat for a subdivision had been approved, with or without condition, pursuant to the provisions of sections 2-11 of chapter 81, Session Laws of Colorado 1972, codified at §§30-28-101, 110, 133, 136, and 137, C.R.S. 1973."

This section, therefore, exempts only those subdivisions approved under subdivisions adopted pursuant to S.B. 35 of 1972. Thus, no subdivision prior to 1972 would be exempt.

Whether the Land Use Commission's interpretation would withstand judicial challenge is uncertain. It does, however, permit the use of H.B. 1041 to regulate development in any approved subdivision adopted prior to the County's adoption of subdivision regulations pursuant to S.B. 35. This would constitute most approved subdivisions which now concern the county.

5. Regulation Under H.B. 1034.

H.B. 1034, the Colorado Local Government Land Use Control Enabling Act of 1974, §29-20-101 et seq., C.R.S. 1973, provides local governments with broad but inspecific authority to regulate land use within their jurisdictions. That act appears to provide a county with certain authority to regulate pollutants resulting from existing uses as well as from development in approved subdivisions.

H.B. 1034, at §29-20-104, C.R.S. 1973, enumerates eight categories of regulatory authority which may be exercised by local governments. These include authority to plan for and regulate land use by:

1. "Regulating development and activities in hazardous areas;

2. "Protecting lands from activities which would cause immediate or foreseeable material danger to significant wildlife habitat and would endanger a wildlife species;

3. "Preserving areas of historical and archaeological importance;

4. "Regulating, with respect to the establishment of, roads on public lands administered by the federal government; this authority includes authority to prohibit, set conditions for, or require a permit for the establishment of any road authorized under the general right-of-way granted to the public by 43 U.S.C. 932 (R.S. 2477) but does not include authority to prohibit, set conditions for, or require a permit for the establishment of any road authorized for mining claim purposes by 30 U.S.C. 21 et seq., or under any specific permit or lease granted by the federal government;

5. "Regulating the location of activities and developments which may result in significant changes in population density;

6. "Providing for phased development of services and facilities;

7. "Regulating the use of land on the basis of the impact thereof on the community or surrounding areas; and

8. "Otherwise planning for and regulating the use of land so as to provide planned and orderly use of land and protection of the environment in a manner consistent with constitutional rights."

Each of these categories could probably be used by an imaginative planner to control water quality impacts of development in a host of ways. For example, on its face, §29-20-104 is probably broad enough to permit a county to adopt a program for the control of pollutant discharge and nonpoint source contamination of water similar to that established by state and federal law. A reading of the

entire act appears to indicate that its apparently limitless scope is an illusion. The proper interpretation of H.B. 1034, at least as regards counties, seems to be that the act was intended to supplement existing enabling legislation rather than to provide an independent body of authority to local governments. This interpretation seems consistent with §29-20-102 of the act which states that the act's purpose is to "clarify and provide authority to local governments." (emphasis supplied) The same conclusion is strongly reinforced by the complete absence of any procedures and, more importantly, enforcement authority within the act. That the procedures and enforcement authority provided by existing legislation were intended to apply to H.B. 1034 is probably the reason for this omission. As a result, the consultant has, throughout §II., supra, and in this section, viewed H.B. 1034 as an act which supplements existing legislation and which is therefore subject to certain of the limitations thereof. Suggested regulations offered here reflect that interpretation.

With the above limitations in mind, the following uses of H.B. 1034 may be proposed:

1. H.B. 1034 could be used, supplemented by County zoning authority, to adopt regulations controlling critical areas and activities. The utility of this technique as a tool to regulate development in existing subdivisions has been described herein. Because H.B. 1034 would be utilized in conjunction with zoning, the possible restrictions on the use of zoning described in §1., supra, should be reviewed.

2. H.B. 1034 could be used to supplement the use of building permit regulation as a means of controlling development in approved subdivisions. See §1., supra. Since H.B. 1034 permits regulation of land use on the basis of impact, the use of those techniques is substantiated. The potential weaknesses in those techniques might be cured by H.B. 1041 also. For example, it may be possible to argue that H.B. 1034 permits the expansion of the definitions of the terms "building" or "structure" beyond their traditional scope, thereby permitting a broader regulatory scope for building permit regulation. Indeed, H.B. 1034 may well permit the use of those techniques to regulate any form of land disturbance in an approved subdivision, whether for construction of a "building" or "structure," or for some other purpose.

3. H.B. 1034 provides additional legitimacy to the use of nonconforming use regulation as a means of dealing with existing development.

4. H.B. 1034 could be aruged to enhance the nuisance authority described in §3., supra, to the extent now exercised by the County. While H.B. 1034 is probably not sufficient to permit nuisance regulation absent other statutory authority, it can be argued that, to the extent nuisance regulation seeks to regulate land use, H.B. 1034 is a supplement. Adoption of a broad scheme for the control of activities contributing pollutants might then be assured.

5. H.B. 1034, in conjunction with existing subdivision regulations, might be used to control development in approved subdivisions by employing it as a basis for vacating existing plats. The County could adopt regulations stating that all undeveloped platted areas of a certain age would be vacated and require reapproval under new regulations prior to replatting. Whether H.B. 1034 is intended to provide this power may be questionable in view of the defeat of a similar proposal by last year's legislature. Specific authority therefor has been proposed once again in this year's legislature. Apart from whether statutory authorization therefor exists is the question of the constitutional protection of rights in existing and approved areas and the extent to which such might be injured by plat vacation.

As can be seen, the foregoing reflect the consultant's interpretation that H.B. 1034 is intended to supplement existing land use legislation -- and perhaps other enabling legislation. If the act is, in fact, intended to be an independent authorization to regulate, other techniques could be considered.

IV. MEMORANDUM RE LEGAL QUESTIONS.

Part h of the contract for this study requires that the following task be performed by the consultant:

> "Research the legislative history of the Colorado statute which created the Three Lakes Water and Sanitation District . . . and prepare a legal opinion on the following issues:
>
> "1. Is the Three Lakes Water and Sanitation District required to construct a wastewater treatment system which does not discharge treated effluent into any of the three lakes (Grand Lake, Shadow Mountain Reservoir, Lake Cranby)?
>
> "2. Is the Three Lakes Water and Sanitation District obligated to provide centralized sewerage collection and treatment service to all property owners within the District?"

In order to complete this task, the consultant performed the following:

1. Review of the "legislative history" of the statute;

2. Review of the statute itself;

3. Correspondence with various legislators and others familiar with the bill.

4. Review of analogous law.

On the basis of the above, the consultant has concluded that the Colorado legislature did not necessarily intend that a "no discharge" system be constructed or that all property owners within the District be served. Unfortunately, this conclusion could not be based solely upon the "legislative history" of the act.

A. Legislative History.

No reported or compiled legislative history is kept in the State of Colorado. This is so not only with respect to the Three Lakes District's organic act but also with respect to all legislation in the state. There are simply no reports kept of committee actions, hearings, floor debates, or any legislative action taken, in either the Colorado House of Representatives or Senate. As a result, the consultant was not able to study the actual legislative history

of the statute in order to determine the above questions. In substitution therefor, the consultant closely reviewed the act itself and spoke with various persons involved with the drafting and sponsorship of the Act.

B. Terms of the Act.

It is a well-established rule of statutory construction that the intent of the legislature is to be divined first from the words of a statute.

The Three Lakes Act is codified at §32-10-101 et seq., C.R.S. 1973. Several sections can be analyzed concerning the foregoing questions.

At §32-10-102 is found the legislative declaration of the Act's purposes. Subsection (1)(a) thereof declares that ". . . the creation of the district promotes the health, comfort, convenience, safety, and welfare of all the people of the state and visitors to the state, and will be of special benefit to the inhabitants of the district and the property therein." (emphasis supplied) This subsection makes it clear that the District is established for the special benefit of its inhabitants and property within the District. This may be taken to imply that all property must be benefited or served, especially when read in conjunction with the general water and sanitation district enabling legislation which declares that such are formed for the benefit "of the inhabitants of said districts" only. §32-4-101, C.R.S. 1973. A reading of the remainder of subsection (1)(a) and other subsections of §32-10-102, however, can be said to support the conclusion that the function of the Act is to cure the lake's pollution problem and not to serve or benefit property owners in particular. See §32-10-102(1)(f), (g). Thus, the declaration can be read to mean that only those areas creating the most serious pollution problems need be served. Indeed, property may be "benefited" even if it is not "served" if the pollution problem is reduced or cured by the District.

A review of the powers of the District is also inconclusive. Those powers, stated generally in §32-10-115, C.R.S. 1973, are similar to the common, broadly-stated powers associated with water and districts in general. Of all of them, perhaps the power to tax can be read to require service of all property owners, since it can be argued that the power to tax implies a duty to serve. While this argument is compelling, case law regarding other water and sanitation districts appears to negate it. See §D.1.a., infra. That law would likely apply to the Three Lakes District as well.

The Three Lakes District is also empowered to compel connection of property within 400 feet of a District collection line. §32-10-117, C.R.S. 1973. It may be argued that the power to compel connection implies a duty to make service available when requested. This argument does not have the force of the taxation argument, which has been rejected by the courts and is probably not a basis for concluding that the District must serve all property owners.

Section 30-10-117 also provides for service charges against "lots" or "lot equivalents" as described therein. The section states that such charges may be made when service is installed and ready for connection within 100 feet of the lot or lot equivalent. It can be argued that this section reinforces the conclusion that the District is under no compulsion to serve all property owners, since it tends to imply that there is no duty on behalf of the District to run lines within 100 feet of all lot lines. Unless it does, the District may make no service charges, but the section does leave the implication that it need not do so. Alternatively, it may be argued that the section is merely intended to limit the District's power to require user fees without indicating anything about service requirements. In either case, the implication is, again, insufficient upon which to base a firm conclusion regarding the District's legal obligation to serve.

Similarly, the remainder of the Act provides little if any legislative intent to require service of all property owners. Subsequent provisions enumerate certain procedural requirements for formation of the District, the District's boundaries, compulsory connection authority of the District, procedures for inclusion or exclusion of land from the District as established by the legislature, financing powers, election procedures, and master planning procedures and requirements. The consultant has reviewed each of these and found no indication of the legislature's intent with respect to the above questions.

One final section of the Act may be of some assistance. Section 32-10-179(3) establishes the relationship of the District with existing municipalities and special districts within its boundaries. It provides:

> "Nothing in this article shall be construed so as to impair or prohibit the right of existing municipalities or special districts existing within the district from either including or excluding territory to or from their existing boundaries."

On the basis of this subsection, it is possible to argue that, since existing entities may expand within the outer boundaries of the Three Lakes District, the District cannot

therefore be required to serve all property owners since some might be served by other entities at some future date. Like the other sections of the Act, this section delivers no clear answer to the scope of service question nor any answer at all to the no discharge question.

It would appear that, at best, the Three Lakes Act is unclear as to its intent respecting the questions under discussion. Those few sections which appear to help at all are subject to varying interpretations.

C. Correspondence with Legislators.

Because of the absence of actual legislative history and because of the uncertainty of the intent of the Act itself, the consultant was forced to attempt to find legislative history elsewhere. Thus, various persons who were involved with passage of the Act in the Colorado legislature and others responsible and familiar with the Act were contacted. Their responses are described below. It should be noted that the opinions of legislators and others do not constitute legislative history as such is defined by the courts. This information, therefore, may be of little value. It is included in the hope that the uncertainty left by the above-discussed material will be clarified.

1. Is the Three Lakes Water and Sanitation District required to construct a wastewater treatment system which does not discharge treated effluent into any of the three lakes (Grand Lake, Shadow Mountain Reservoir, Lake Granby)?

Four legislators and one person familiar with the Act were contacted with regard to the above question. The legislators, each of whom was in the Colorado House or Senate when the bill was passed and who were involved with its passage, were Senators Theodore Strickland, Joseph Schieffelin, and William Garnsey, and Representative Robert Kirscht. Also contacted was Jon Mulford, an attorney involved with the drafting of the Act. All appeared to agree that the legislature did not intend to require that a "no discharge" system be built. Each stated that the primary concern of the legislature was to create the means for providing a system which would prevent pollution of the lakes, though no particular system was envisioned.

Senator Schieffelin: Senator Schieffelin said that he does not recall any discussion about the kind of plant which was to be built. He stated that it was the basic theory of the Act to create a district with sufficient power, particularly taxing power, to do what was needed to alleviate

the recognized pollution factor. There was no specific solution in mind.

Senator Strickland: Senator Strickland commented that the only matter contemplated by the legislature was that there was a water quality crisis that needed solution. Creation of the District was the response to the crisis. No specific treatment system was conceived or intended. Rather, the legislature's general intent was to protect the property owners in the three lakes area.

Senator Garnsey: Senator Garnsey stated that the general intent behind the creation of the District was to provide a means for dealing with the recognized pollution problem. No particular system was contemplated. The independent District was created because it was believed that local communities would not deal with the problem on their own, either because of a lack of sufficient tax base or because the local benefit to be derived from such a system was not great enough.

Representative Kirscht: It was Representative Kirscht's opinion that the general intent of the legislature was simply to stop the pollution of the lakes. There was no intent to require one specific means of doing so. Any means that worked would be within the intent of the statute.

John Mulford: Mr. Mulford held a slightly different opinion regarding the "no discharge" question. While he agreed that the primary concern of the legislature was to create an entity which would have the power to abate the pollution problem, he stated that he believed a system which would discharge into the Colorado River at a point south of the lakes near Grandy was at least contemplated at the time the legislation was being created. He did, however, agree that it was not intended by the Act to lock the District into any particular solution.

Apart from the foregoing statements of persons involved with the authorization of the District, the following information was available to the consultant:

1. A 1971 engineering study prepared for the Three Lakes Anti-Pollution Committee. Wright-McLaughlin Engineers, Preliminary Conceptual Study Plan, Feb. 1971. That study did envision a system which discharged treated effluent into the Colorado River south of the three lakes.

2. Conclusions of representatives of the United States Park Service, Bureau of Reclamation, and Public Health Service, and the Colorado Health

Department, reached at a meeting of February 21, 1968. Their recommendations did conceive of a general plan under which discharge of treated effluent would occur south of the three lakes.

While this information is clearly not legislative history, even in a nonlegal sense, the conclusions of the governmental panel, at least, were public information available to the Colorado legislators. It may be argued that these conclusions, and again those of the governmental panel especially, influenced the legislature and indicate its intent to create a "no discharge" system.

The conclusions which can be drawn from the foregoing information are conflicting. Historical information available to the legislators tends to indicate that a system discharging south of the lakes was contemplated by certain persons who originally studied the water quality problem. Despite this, a sampling of persons closely involved with the Act's passage deny any legislative intent to require that solution. This may be interpreted as an expression of the legislature's rejection of the conclusions of the early studies. It would appear safest to conclude that a system discharging south of the lakes is not required by the Act, though it is certainly permitted.

2. Is the Three Lakes Water and Sanitation District obligated to provide centralized sewerage collection and treatment service to all property owners within the District?

There was agreement among all those persons contacted that the legislature did not intend that the Water and Sanitation District be obligated to provide services to all property owners in the District.

Senators Strickland and Schieffelin agreed that all new property owners should be forced into whatever system was eventually decided upon. With respect to existing property owners, Senator Stickland believed that the intent was to continue to provide services where they were already being provided, and to service additional property owners as became necessary to prevent or stop pollution. Senator Schieffelin recalled that the intent was to force existing property owners into the system only when pollution could be traced to them.

Senator Garnsey believed that, when the problem could be handled more economically and efficiently on the basis of existing systems, then property owners within these systems would not have to be serviced by the District. This, of course, comports with §32-10-179(3), C.R.S. 1973.

Mr. Mulford recalled that there was no intent to provide service for all property owners, but rather to provide service for all those for whom service was being provided already, and to take more people into the system as this became necessary or economically feasible.

While the question of precisely who must be served by the District is not clearly answered by the responses of the legislators and Mr. Mulford, they do seem to indicate that not all property owners within the District are required to be served. In general, it appears that the legislature simply wanted to solve the water quality problems of the three lakes without specifying a particular method. Arguably, if this requires providing service to all property owners, then the Act should be read to require such. Alternatively, if such could be accomplished by serving certain areas only, then that might be taken to constitute the legislative intent. The responses of the legislators tend to support the latter.

D. Other Law Relating to Question of Scope of Service.

Because the question of whether the Three Lakes District is bound to construct a system which discharges no treated pollutants into the lakes is indigenous to the District alone, reference to other law dealing with water and sanitation districts is unhelpful. The question of whether the District must serve all property owners within its boundaries is, however, subject to some clarification by reference to Colorado law other than the Three Lakes Act.

1. Statutory Comparison.

Colorado statutes and case law dealing with water and/or sanitation districts other than the Three Lakes District reinforce the conclusion that the District was not intended to be obligated to serve all property owners. A review of the various water and/or sanitation districts provided for at §32-4-101 *et seq.*, C.R.S. 1973, indicates that, with one exception, *see* §32-4-230, C.R.S. 1973, at least on the face of the legislation, no intent to require service of all property owners was ever contemplated. This seems consistent with a reasonable interpretation of the Three Lakes Water and Sanitation District Act.

2. Colorado Case Law.

a. Taxation in Absence of Benefit.

Colorado case law also supports the proposition that not all property owners must be served. The function of a

water and sanitation district is to serve the health, safety, and welfare of its inhabitants, not merely the property owners of the district. People ex rel. Dunbar v. Proposed Toll Gate Sanitation District, 128 Colo. 33, 261 P.2d 152 (1953); Ruberoid Co. v. North Pecos Water and Sanitation District, 158 Colo. 498, 408 P.2d 436 (1965); but see §32-10-102(1)(a), C.R.S. 1973. That the Three Lakes District was established for this purpose, among others, is expressly stated by its organic act. See §32-10-102(1)(a), C.R.S. 1973. As a result, water and sanitation districts generally, and the Three Lakes District in particular, are authorized to levy and collect ad valorem property taxes based upon the assessed valuation of the property within the district rather than benefit thereto from district services. Ruberoid, supra; Gordon v. Wheatridge Water District, 107 Colo. 128, 109 P.2d 899 (1941); see §32-4-115(1)(1), 121, C.R.S. 1973. Thus, property within a district may be taxed in order to provide services for the public benefit even if the property itself is not benefited. Ruberoid, supra. Failure to provide benefit is not, by itself, sufficient grounds for excluding property from a water and sanitation district. Id. As was said in the Ruberoid decision:

> "The findings and conclusions that plaintiffs were not entitled to exclusion are nowise legislative in nature. The court's judgment finds clear support in the record because there was no evidence offered to sustain the application for non-inclusion other than asserted lack of benefit. On the other hand, the community health and welfare was shown to be in jeopardy by the continued use of septic tanks for domestic and industrial wastes and sewage in soil not suitable for such continued usage. It was also shown that the shallow wells from which industrial users were drawing millions of gallons of water and upon which the inhabitants were dependent for water supply could not be used as a source indefinitely as both diminution and depletion as well as potential contamination were the inexorable prospects in the future." (emphasis supplied)

Since water and sanitation districts act to benefit the public generally, and not merely property owners, since property owners may be taxed by a district without receiving benefit therefrom, and since failure to receive benefit is not, in itself, sufficient grounds for exclusion from a district, it would seem accurate to conclude that there is no legal obligation for water and sanitation districts, including the Three Lakes District, to supply services to all property owners within a district, at least if such is not necessary for the health, safety, and welfare of the public.

b. Governmental v. Proprietary Nature of Services.

In Colorado, it is quite clear that provision of services by a water and sanitation district is a proprietary rather than governmental function. National Food Stores v. North Washington Street Water and Sanitation District, 163 Colo. 178, 429 P.2d 283 (1967); Cerise v. Fruitvale Water and Sanitation District, 153 Colo. 31, 384 P.2d 462 (1963). By virtue of such a classification, it would appear that water and sanitation districts, and the Three Lakes District in particular, are not obligated to serve all property owners within the District. As was stated in the National Food Stores decision:

> "The district is no different than any other water and sanitation district; and since the services it renders are proprietary in nature they may be contracted for as is provided by the pertinent statutes dealing with the powers of the board created to administer the district. By the provisions of C.R.S. 1963, 89-5-13(4), [now C.R.S. 1973, 32-4-113 (1)(d)] the board of directors of a water and sanitation district is granted power 'to enter into contracts and agreements affecting the affairs of the district * * *.' No restrictions are placed upon boards as to the types of contract into which they may enter." (emphasis supplied)

Thus, it would appear that a water and sanitation district may render its services as its management sees fit, conditioning or withholding them for any reasonable purpose. It may, of course, be argued that the National Food Stores case stands only for the proposition that services can be conditioned, not that they may be withheld, by a district. Since in that case the district's services would have been withheld if National did not agree to the condition, it seems improper to so limit the case. Certainly the court did not so limit it. In addition, the proposition that services may be withheld conforms to other authority as well. According to McQuillan's treatise on Municipal Corporations, for example, this rule is the general one, and a municipal corporation, as the owner of its facilities, may refuse services or require permits for the extension thereof in accordance with properly-adopted standards. McQuillan, Municipal Corporations, §31.31; see also 93 CJS Waters, §243(1), et seq.

c. Water and Sanitation District as a Public Utility.

Not all authority necessarily supports the conclusion that a water and sanitation district need not serve all

property owners within its jurisdiction. It is possible to argue that such districts are public utilities bound to perform just such a duty.

While water and sanitation districts are generally not subject to the jurisdition of the Public Utilities Commission, they may constitute public utilities under the test enumerated in City of Englewood v. City and County of Denver, 123 Colo. 290, 229 P.2d 667 (1951), and recently reaffirmed in City of Boulder v. Robinson, ____ Colo. ____, 547 P.2d 228 (1975). That test is stated as follows:

> ". . . to fall into the class of public utility, a business or enterprise must be impressed with a public interest and that those engaged in the conduct thereof must hold themselves out as serving or ready to serve all members of the public, who may require it, to the extent of their capacity. The nature of the service must be such that all members of the public have an enforceable right to demand it. . . ."

This test has been applied to water and/or sanitation districts on at least two occasions. In Schlarb v. North Suburban Sanitation District, 144 Colo. 590, 357 P.2d 647 (1960), the district was held not to be a public utility. In City and County of Denver v. Glendale Water and Sanitation District, 152 Colo. 39, 380 P.2d 553 (1963), the district was classified as a utility. As the discrepancy in those cases and the Englewood and Robinson decisions indicate, the question of whether a municipality or quasi-municipality is acting as a public utility is a factual one. If it is found to be so, however, it must then serve all persons desirous of service unless prohibited by valid economical or utility-related reasons. Robinson, supra. If the Three Lakes District is a utility, therefore, it may be bound to serve all property owners.

The key issue in the determination of whether a district is a utility is whether the district has held itself out as serving or ready to serve all members of the public. Since the Three Lakes District has not constructed works or offered services, only its organic act and enabling legislation exist to help in this determination. The enabling legislation has been discussed above and it has been concluded that it does not indicate any intent to require the District to serve all property owners. Since existing districts with the Three Lakes District may serve persons, this appears to be a reasonable conclusion. See §32-10-179, C.R.S. 1973. Neither does the District master plan, though presenting and recommending a regional system, indicate an intent, at least at present, to serve all persons within the

District. As a result, it appears that the District has not intended to hold itself out "to serve all members of the public." This being the case, it should be concluded that the District is not a public utility. Such a conclusion is consistent with the decisions discussed in subsections a. and b., supra, which indicate that a district is under no legal obligation to serve all property owners. Neither does the District appear to have attempted to undertake any other form of service obligation with relation to such.

E. Conclusion.

On the basis of the foregoing, the consultant concludes that:

1. The Three Lakes Water and Sanitation District is not required to construct a collection and treatment system which does not discharge treated pollutants into the three lakes.

2. The District is under no obligation to serve all property owners within the boundaries of the District.