INTERIM

LAND USE and NEW ENGLAND'S ENVIRONMENT

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION I, JOHN F. KENNEDY FEDERAL BUILDING,
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Land Use Trends Above picture taken before Route 128 was constructed around Boston. Cover shows same area with Route 128 and associated development patterns.

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United States Environmental Protection Agency
Region 1

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Boston, Massachusetts 02203

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LAND USE ISSUES CONFRONTING EPA

Daily, countless land use decisions are determining New England's future environmental heritage, and EPA actions are affecting land use — whether or not we have a conscious land policy. Environmental quality and land are inseparable.

Land uses determine the location, type and timing of development that generates pollution; thus, land use decisions can protect or degrade the environment. Lack of State and regional land use policies that adequately consider air, water, solid waste, noise and other environmental effects has thwarted rational location and construction of oil facilities, power plants, highways, and real estate development. In the absence of deliberate land policy, land use decisions inevitably continue with little regard for their impact on growth and the environment.

Waste treatment plant and sewer construction — now the Nation's largest public works program — itself can determine land development — a double-edged sword. Permits covering air emissions and water discharges likewise guide development. The residuals from intensified air, water and solid waste treatment require carefully located disposal sites.

Our water, air and solid waste clean up can be self-defeating if it merely stimulates unsound development that generates another round of pollution, blocks public access and defaces the scenic setting. Water and air quality are dependent upon land use measures for maintenance of nature's wetlands and greenspace filter systems. Further, control of nonpoint pollution from urban and rural runoff requires complementary land management practices.

To meet Congressionally-mandated standards and goals, the States and localities must enforce environmentally-sound land use policies. The Clean Air Act, the Federal Water Pollution Control Act (FWPCA) and the Safe Drinking Water Act may require location policies to control new pollution sources. Air quality must be maintained through State Implementation Plans scheduling measures to control emissions, including "land-use and transportation controls". These plans embrace Air Quality Maintenance Plans, transportation control strategies, indirect source regulations, and significant deterioration regulations. Areawide waste treatment management plans (Sec. 208 of FWPCA) must establish a "regulatory program" to control point and nonpoint sources of pollution ("including land use requirements"). Wastewater treatment capacity must meet "needs", which reflect growth and conservation goals. The Safe Drinking Water Act requires State permit programs to protect groundwater supplies. The Noise Control and Solid Waste Acts relate emission and waste levels to land use.

The National Environmental Policy Act (NEPA) and the Intergovernmental Cooperation Act (OMB Circular A-95) require full disclosure and evaluation of land use impacts of Federal actions (grants, permits, loans, direct projects). Under the Coastal Zone Management Act, the New England coastal states are developing coastal zone management programs that incorporate the requirements of the Clean Air Act and FWPCA, define "permissible land and water uses", consider the "national interest" in siting major facilities, preserve ecological-recreational values, and establish priorities among uses. Comprehensive planning assistance grants (Section 701 of the Housing and Urban Development Act) require land use plans that consider environmental factors.

EPA recognizes its responsibility to assure that its own diverse program decisions are made with deliberate consideration of their impacts on land uses and future environmental quality. As an environmental guardian, EPA must exercise leadership to heighten the awareness of the environmental implications of the land use decisions being made daily by the local, State and private interests in whose hands the responsibility for such decisions resides.

EPA Administrator Russell E. Train has emphasized his concern:

> "We have become increasingly aware of the involvement of EPA's programs with land use patterns and of the relationship of these programs to each other and to other Federal, State, and local efforts. This has obliged us to take a close and continuing look at our activities and to place them in proper perspective in the larger context in which they must be achieved."
>
> Russell E. Train, before the Subcommittee on Energy and the Environment, U. S. House of Representatives, March 25, 1975.

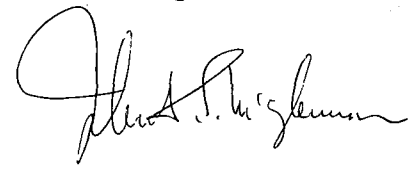
To fulfill this responsibility, Administrator Russell E. Train has established an Office of Land Use Coordination in Washington, and has circulated for comment a proposed Land Use Policy Statement for agency-wide guidance. EPA, Region I, in turn, proposes this Regional Policy Statement to orchestrate a rational environmental framework for the continuing local State, Federal and private land use decisions in New England. It suggests policies for implementation tailored to New England's unique environmental assets, traditions, and aspirations.

Deliberate recognition of land use as a positive environmental tool has remained a sensitive, complex issue. "Land use" has so many facets and involves so many public and private interests that it has, far too often, remained an emotional or elusive catch phrase.

To join in creative dialogue, first let us view **land use as distribution of man's activities on the land. Land use policy,** then, **becomes a deliberate public judgment and affirmation of how to use land to meet environmental, social and economic objectives.** It embraces the formalized location, relationships and timing of activities on the land, with proper respect for its resource assets and liabilities, together with the legal and institutional arrangements for reaching and carrying out such decisions. *Specific land use tools* embrace adopted plans, acquisition in fee or easement, zoning and regulation, provision (or withholding) of public facilities and tax policies.

Localities and the States have the prerogative to make the day-to-day land use decisions which impact land and the environment in the regional or national interest. Thus, it is their responsibility to exercise their decision-making in a manner to meet State-Federal *environmental standards*, and, in addition, to *prevent* further degradation of New England's priceless environmental assets, recognizing social and economic goals.

Hopefully, we all will join together to shape our land use policies toward New England's common environmental goals with deliberate forethought and democratic involvement. Otherwise, land use decisions involving public as well as private interests will drift by default with more happenstance than foresight.



John A. S. McGlennon,
Regional Administrator

LAND USE AND NEW ENGLAND'S ENVIRONMENT

SUMMARY

LAND USE ISSUES CONFRONTING EPA (Pages 3 - 4)

POLICIES (Pages 6 - 9)

General Policies on Roles and Responsibilities (page 6)

1. *Local, State and Federal roles:* The States and localities make the day-to-day land use decisions; the achievement or protection of environmental standards must be among the results of each and every land use decision. (p.6)
2. *EPA environmental leadership:* Provide leadership to increase environmental awareness in land use decisions. Evaluate and integrate programs with respect to land use. (p. 6)
3. *State-local environmental leadership:* EPA encourages States and localities to develop and carry out environmentally-sensitive land use plans and policies. (p. 6)
4. *Interagency coordination:* Work with Federal public works, development, and natural resources agencies. (p. 7)

Specific Policies: EPA, *working with the States and localities,* will provide leadership and technical guidance on environmental objectives *to actively promote the following policies:*

1. *Guide land use patterns as a conscious State-local policy to prevent future pollution and to restore urban quality.*
   Location, types and timing of development should consider: (p. 7)
   a. Pollution-prevention location policies.
   b. Environmentally-sound and energy-saving land use patterns.
   c. Environmental buffers.
   d. Restoration of a liveable, quality urban environment.
2. *Assure that regional public facilities support environmental standards and policies* (e.g., transportation, energy, utilities, solid waste, water resources). (p. 7)
3. *Coordinate EPA wastewater treatment facilities grants and discharge permits with State and local land use plans, open space plans and critical areas protection. (p. 7)*
4. *Integrate EPA air quality permits and control/maintenance strategies and State and local land use and growth patterns.* (p. 8)
5. *Recognize the interdependence of environmental standards and related land uses* (e.g., compatible air, water and land quality; Air Quality Maintenance Planning and significant deterioration classification).
6. *Safeguard the public interest in our investment in environmental standards through State-local scheduling of access and shoreland protection with environmental clean-up timetables.* (p. 8)
7. *Preserve environmentally-critical areas through State, local, and selected Federal actions* (e.g., wetlands, shorelands, flood plains, aquifers, steep slopes). (p. 8)
8. *Maintain prime productive lands through State, local, and selected Federal actions* (e.g., prime agricultural lands, estuaries and habitat. (p. 8)
9. *Develop long-range site plans for integrated waste management and for water supply* (e.g., air, water, solids and water supply). (p. 9)
10. *Adopt complementary land management practices to control nonpoint source pollution or "indirect sources"* (e.g., agricultural, forestry, pesticide, construction, and urban runoff; air pollution associated with land or traffic management). (p. 9)

IMPLEMENTATION (Pages 9 - 12)

EPA, for its part, *working with the States, regional agencies, and localities, will actively support environmentally-sensitive land use policies* through steps as follows:

1. *Promote active awareness of environmental standards and implications of land use decisions* (e.g., planning assistance, grants, permits, impact statements, and public information). (p. 9)
2. *Integrate the several EPA environmental programs into common State or local land use policies for pollution prevention* (e.g., coordination of water quality, water supply, air quality and solid waste programs with one another and with State-regional land use planning). (p. 9)

3. *Incorporate the environmental standards and goals into State Coastal Zone Management (CZM) programs* (e.g., workshops, environmental planning coordination, and reviews). (p. 9)

4. *Offer EPA technical assistance on environmental constraints in location of major regional facilities* (e.g., oil, power plants, utilities). (p. 9)

5. *Require grant and permit applicants to document coordination with State-local land use plans and evaluation of land use and associated environmental impacts.* (p. 10)

6. *Evaluate land use changes and associated environmental impacts in preparing EPA environmental assessments and impact statements (E.I.S.) and in reviewing other agencies' E.I.S.* (p. 11)

7. *Support A-95 review of the land use and associated environmental impacts by State and regional agencies.* (p. 11)

8. *Urge recreation and land use agencies to schedule public access and shoreland protection with water and air clean-up.* (p. 11)

9. *Plan for multiple use of waste treatment facilities and rights-of-way.* (p. 11)

10. *Provide guidance to land use and natural resource agencies on needs and ways to preserve environmentally-critical or productive areas.* (p. 11)

11. *Work with concerned Federal and State agencies on "indirect" sources of pollution* (e.g., construction, transportation, agricultural, forestry agencies). (p. 11)

12. *Solicit research and demonstration on relationships between land use patterns and environmental quality.* (p. 12)

POLICY

General Policies on Roles and Responsibilities

1. *Local, State, Federal roles: The achievement or protection of environmental standards must be among the results of each and every State or local land use decision.* Localities and private landowners should continue to make the day-to-day land use decisions within the framework of State enabling laws, land use policies, and regulations in the public interest. Jointly with the States, EPA sets and enforces the environmental standards that the States, localities, and private interests must meet, as a minimum, in their daily land use decisions.

In these "local" decisions, regional, state and even national interests must be considered to protect the broader public interest and future generations. These include not only preservation of environmentally-critical or productive areas (wetlands, prime agricultural lands) but also the many seemingly minor land use decisions that cumulatively jeopardize the very livelihood or well-being of the entire region. For example, filling in many small wetland parcels diminishes the total available wetlands upon which the entire region depends, and, incrementally, "local" developments can impair a region's air quality or destroy its unique qualities.

2. *EPA environmental leadership:* EPA will exercise leadership in implementing an environmental strategy for land use decisions throughout the conduct of its programs: public information, standards setting, planning, technical assistance, research, and demonstration, grants, permits, environmental impact statements, and enforcement. EPA will review and coordinate its several programs with respect to their overall impact on land use; conversely, working with State, regional and Federal land use agencies, it will identify land use considerations common to its several programs.

At a minimum, EPA has the responsibility to work jointly with the State environmental agencies to point out environmental constraints to the land use decision-makers. EPA shall offer technical assistance leadership to help the States and localities develop and keep current land use plans with full awareness of environmental constraints, and to insure that land use decisions become sensitive to their far-reaching environmental consequences.

3. *State-local environmental leadership:* Several New England States and a few far-sighted localities are pioneering with environmentally-sensitive conservation and development plans, policies or regulations to guide land use, public facility investment, and major private developments. EPA actively supports and encourages such State and local efforts, often involving effective conservation commissions and land trusts.

Notably, Vermont, Maine and Connecticut have tried varied statewide approaches for considering environmental constraints in land use decisions: Vermont's Act 250 established concurrently a State regional district system for land use planning and regulation; Maine's Site Selection, Land Use Regulation, and Shoreland Zoning Acts all require permits for developments having substantial impact; *Connecticut's Plan of Conservation and Development* identifies areas best suited for development and those best suitable for environmental protection.

4. *Interagency cooperation:* EPA will work closely with Federal public works and development agencies concerned with evaluating the environmental consequences of their land use decisions and with Federal agencies seeking protection for environmentally-critical or productive lands.

Specific Policies

EPA, working with the States and localities, will provide leadership and technical guidance *to actively promote the following policies:*

1. Assure that land use planners and decision-makers at all levels of government and the private sector take environmental considerations fully into account in shaping the location, types, intensity and timing of development. Land use policies shall become a positive tool to *prevent* future air, water and noise pollution and solid waste problems. Location policies should be used systemmatically as a means to maintain air and water quality standards, meet load allocations, and achieve non-degradation objectives.

Pollution abatement and land use policies shall go hand-in-hand to restore and maintain a liveable environment and daily amenities for urban dwellers, rich and poor alike.

EPA and the State environmental agencies should keep the responsible State, local, and private decision-makers specifically informed on environmental standards and objectives and encourage community land use decision-makers and developers to adopt development and conservation policies to:

a. *Locate new sources of pollution (including indirect sources) so as to maintain air and water quality and to minimize noise.* States, localities, and developers have the opportunity to concentrate development in areas having suitable soils and public services and to protect environmentally-critical areas and areas of high air and water quality and relative quiet. For example, *Connecticut's Plan of Conservation and Development* directs development to identified development modes where waste water treatment is cost-effective and least likely to degrade high quality waters; Vermont's non-degradation policy prohibits location of new discharges upstream from the highest point of existing discharge.

b. *Promote land use patterns that reduce pollution levels, conserve energy and enhance community convenience and amenities.* Special attention should be given to proximity of residences, schools, work, shopping, recreation and other daily activities. This will promote pedestrian and bicycle travel, reducing motor vehicle trips and associated air pollution, noise, congestion and fuel consumption. Planned concentration of development will make rapid transit feasible and convenient. Well planned development will assure that growth will not further violate standards once they have been achieved.

c. *Locate and site public and private development in patterns that preserve natural watercourses, ridgelines, or vegetative strips as buffers to reduce air and water pollution and noise.* Location and site plans should preserve existing streams, wetlands, escarpments and other topographic features as environmental buffers. This will also provide neighborhood open spaces, afford visual amenities, increase property values, and enhance long-range community values. Inter-connected on a regional scale, such buffer features will also provide trail and bikeway systems.

d. *Rehabilitate our center cities in such a manner as to bring the benefits of enhanced air and water quality and reduction in noise and solid waste nuisances home to the immediate surroundings where most New Englanders live, work and play each day.*

2. Assure that the location, scale, type and timing of major regional facilities is conducted with full knowledge of and supports all environmental standards, objectives and land use policies (e.g., transportation, energy, utilities, solid waste, water resources facilities). EPA, working with the States and other Federal agencies, will support early consideration of potential land use changes and environmental effects both in exercising environmental leadership and in planning grants, permits and review of Federally-assisted projects (including Coastal Zone Management Program, NEPA, Section 309 of the Clean Air Act, and A-95).

3. *Coordinate EPA grants for wastewater treatment facilities and discharge permits with State and local land use plans, air quality maintenance plans, open space plans and protection of environmentally-critical areas.* EPA requires that the location, siting, design capacity and timing of facilities be consistent with such plans, unless exceptional health or environmental considerations can be shown to be overriding. EPA, for its part, will make sure that wastewater facilities that have the potential for stimulating growth are consistent with Air Quality Maintenance Plans or significant deterioration regulations. In administering construction grants and permits, EPA urges the State environmental agencies to work with planning agencies, localities, consultants and citizens on

procedures for specific coordination of treatment facilities and air and water permits with areawide growth and conservation goals, land use plans, and capital improvement programs. EPA requires specific documentation of coordination with land use plans and the potential for secondary land development, premature urbanization of undeveloped areas, and associated environmental impacts. Project plans must locate ultimate disposal sites.

4. *Integrate EPA air quality new source performance review and air quality maintenance strategies and State and local land use and growth policies.* EPA requires New Source Performance Standards, Transportation Control Plans, Air Quality Maintenance Plans, Indirect Source Review, and Significant Deterioration policies all be coordinated with land use and growth policies to assure that deliberations on future growth fully consider impacts on air quality levels and standards. EPA requires that the States identify areas which have the potential for exceeding the standards over the next ten years and develop plans to protect standards. Land use policies will be necessary in some areas to do this. EPA facilities grants and discharge permits shall, in turn, support such policies.

5. *Develop environmental standards and enforcement as a positive package to maintain the overall environmental quality essential for particular land uses.* Desired land uses, such as New England's recreational assets of pristine lakes, coastline and mountain backdrop require a continuing *commitment* to high standards for *all* facets of the environment: air, waters, solitude, scenic setting and land use in their totality.

Standards for air and water and guidelines for noise and solid waste, in turn, influence associated land uses. High ambient air quality, water and noise standards require careful evaluation of potentially degrading sources (including indirect sources), affecting their location, scale and design.

Ideally, since the several environmental standards and related land uses are interdependent, EPA, the States and localities should develop and enforce them as an integral package to sustain the intrinsic landscape features and associated uses. Backed by proper land use planning and regulation, the environmental standards package can be used as a tool to assure continuance of compatible land uses and, if consistently enforced, will provide a dependable basis for future planning, development and conservation.

6. *Safeguard the public interest in our environmental standards through State-local scheduling of access and shoreland protection with investment in environmental clean-up timetables.* If the public does not take immediate steps to "capture the benefits" prior to completition of our pollution control investment, we will lose our rights to the very recreational, scenic, and other values sought through the standards for high quality water and air and acceptable noise levels. FWPCA specifically encourages combining "'open space' and recreational considerations" with waste treatment management. State and local agencies and private interests have a unique opportunity and responsibility to *schedule now* the necessary protection of public access and of the shoreland setting (or buffer areas) to ensure public enjoyment of the substantial investments in water, air, and noise pollution control and improved solid waste management.

7. *Preserve environmentally-critical areas through State, local and selected Federal actions (e.g., wetlands, shoreland, flood plains, ground water recharge areas, water supply lands, steep slopes and vegetative buffers).* These natural systems filter out water and air pollutants, reduce noise, and afford attractive visual settings. At the same time, they provide invaluable fish and wildlife habitat and outdoor recreation opportunities. Their preservation yields multiple reinforcing environmental, social, and economic benefits.

EPA's National "Wetlands Policy" officially recognizes the critical need to protect wetlands and prohibits construction of waste treatment facilities in wetlands (except where no alternative of lesser environmental damage is feasible). The Safe Drinking Water Act calls for protection of groundwater supplies and encourages compatible uses of existing and potential water supply lands. State plans to prevent significant deterioration of air quality may classify pristine areas where little growth would be permitted, reinforcing critical areas protection.

8. *Dedicate prime productive lands to those uses for which intrinsically they are environmentally-suited to meet long term social and economic needs through State, local and selected Federal action (e.g., prime agricultural lands, productive estuarine systems, critical fish and wildlife habitat, and quality outdoor recreation areas).* If New England's prize valley farms and estuaries continue to be preempted by urban/resort development, they will be lost forever as a productive base to sustain our very survival. Later, other lands will have to be sought — less fertile, more susceptible to erosion and requiring greater energy consumption. Further, preservation of prime productive lands and air quality maintenance mutually reinforce one another.

9. *Develop State and areawide site location plans to meet long-range wastewater and solid waste management and water supply needs.* Recycling and integrated waste management, encouraged in FWPCA and Solid Waste Acts, require careful land use planning and reservation of future sites. Locational requirements embrace transportation, processing, marketing, treatment, ultimate disposal, as well as potential technological change and future expansion. The Clean Air Act and FWPCA require consideration of the environmental effects of control processes and ultimate disposal of sludge and other residues.

EPA, further, encourages the States and localities to employ land use planning as a tool for evaluating the trade-offs among air, water, and solid waste measures on degradation of the common land base.

10. *Adopt complementary land management practices that control pollution from "nonpoint" and "indirect" sources through State assistance to landowners.* Land *management* practices of private (or public) landowners can reduce water pollution from nonpoint sources (including pesticides), air pollution from open burning practices and poor traffic control, and solid waste problems from inadequately operated disposal areas.

EPA and the States under FWPCA must identify and propose solutions to nonpoint sources of water pollution "including land use requirements". Groundwater pollution from septic systems must be controlled. Pesticide use and application are regulated under the Federal Insecticide Fungicide and Rodenticide Act. State air quality implementation plans include provisions to control open burning, transportation and land use strategies, and "indirect source" regulations which restrict vehicle access and operation. EPA solid waste management guidelines cover disposal operations and ultimate site use.

IMPLEMENTATION

EPA, *working with the States, regional agencies and localities,* will actively *support environmentally-sensitive land use policies* through steps as follows:

1. *EPA will actively inform the land use decision-makers of the environmental standards and promote awareness of the environmental implications of land use decisions.* It will do so through workshops, planning assistance to State and regional agencies, municipal facilities grants, discharge permits, air quality regulations, environmental assessments and impact statements, research and public information.

2. *EPA, working with State and regional agencies, will identify opportunities for considering land use policies for pollution prevention common to the several EPA programs.* EPA will coordinate its several planning programs with land use considerations: areawide waste treatment management plans (Sec. 208 of FWPCA), air implementation plans (Sec. 110 of Clean Air Act — e.g., Air Quality Maintenance Plans, Transportation Control Strategies, Indirect Source requirements, and Significant Deterioration plans), aquifer protection (Sec. 1424 of Safe Drinking Water Act), and State and regional solid waste plans (Secs. 208 & 209 of Solid Waste Act). EPA will strongly encourage State and regional efforts to integrate systematically the air, water quality, water supply, solid waste and noise programs as an environmental package into a common land use plan.

Under OMB Circular A-95, EPA will require State and regional planning agencies to develop common assumptions on population size and distribution, economic activity and land uses. The States and localities will find it advantageous to integrate into a common land use policy the location policies, land use regulations, performance standards, and tax policies required to meet the several environmental requirements.

EPA will hold workshops of interdisciplinary staff teams (air, water, solid waste) with State and regional planning agencies and their consultants to integrate the several environmental programs into a common land use policy. EPA will initially demonstrate this approach in a few selected planning regions (Sec. 208 of FWPCA), confronted with several critical environmental and land use issues.

3. *EPA will work closely with the Coastal Zone Management Office (CZM) and the coastal States to incorporate the air, water and other environmental standards and objectives into State CZM programs.* EPA will hold workshops with State CZM liaison officials, environmental agencies, and appropriate regional planning agencies on environmental goals and requirements. EPA and the State environmental agencies will periodically review CZM programs to certify that State CZM land, air and water uses meet environmental standards and goals, and in turn, they will assure that their programs are consistent with CZM (Sec. 307 of CZM).

4. *EPA will offer technical assistance on the environmental considerations and permit requirements in the location and siting of major regional facilities.* These include pending decisions on oil developments, power plants, transportation systems, and waste treatment facilities. EPA will

schedule planning assistance to help the coastal States and regional planning agencies identify the diverse environmental impacts of potential on-shore developments associated with any off-shore oil drilling or production.

5. *EPA, on its part, will require grant and permit applicants to document full coordination of their proposals with official State and local land use plans and careful evaluation of their land use impacts.* Location and design assumptions shall document the analysis of population and growth goals, land use plans, open space plans, conservation plans, secondary impacts and associated environmental effects. EPA will take advantage of land use as the common factor to relate its diverse, sometimes conflicting, programs which influence land use decisions.

Further, in administering the grant and permit programs, EPA will encourage the States and localities to use land use policy as a positive alternative to future investment in remedial waste treatment facilities and to direct the location and timing of development toward areas where treatment facilities prove cost-effective and environmentally-sound.

The relevant EPA programs and requirements are:

a. *Areawide waste treatment plans* — develop water-related land use plans evaluating environmental constraints on land use, environmentally-critical areas, facilities systems, non-structural measures, nonpoint source controls ("including land use requirements") and regulatory programs for implementing the plans. *Facilities plans, basin plans, and permits must conform to these plans.* (Sec. 208 of FWPCA).

b. *Basin plans* — relate wastewater load allocations to plans for the location, scale and timing of development (potential pollution sources), to land use plans and to conservation plans. Load allocations are enforced through the permit program (Sec. 303(e) of FWPCA).

c. *Wastewater treatment facilities plans* — document relationship of location, siting, design capacity and timing of waste treatment plans and sewers to land use and conservation plans (Sec. 201 of FWPCA). Design capacity must meet "needs" and "needs" derive from land use patterns (Sec. 204 (a)(5) of FWPCA). Environmentally acceptable sludge disposal sites must be identified.

d. *Municipal facilities grants priority systems* — give high priority in allocation of grant funds to projects to treat current pollution loads and low priority to sewers to serve future development. Discourage or reject projects which lead to premature urbanization of unpopulated areas. (Secs. 106 & 303(e) of FWPCA).

e. *Municipal treatment facility discharge permits* — submit programs for allocating growth to keep within design capacity once the flow exceeds 80 percent of capacity (Sec. 402(b) and EPA regulations).

f. *Industrial permits: new sources of air emissions and water discharges* — evaluate impacts of the proposed emission or discharge upon air and water standards and land uses, including potential secondary impacts upon land use and associated environmental quality (Secs. 110 and 111 of Clean Air Act, Sec. 402 and 511 of FWPCA and NEPA).

g. *Development above water supply aquifers* — prohibit Federal financial assistance (grant, contract, loan guarantee, or otherwise) which EPA determines may contaminate a sole source aquifer (Sec. 1424 of Safe Drinking Water Act).

h. *Air quality maintenance plans* — introduce emission controls and land use policies to maintain air quality in areas, such as southern New England, where potential growth may violate national air quality standards (Sec. 110 of Clean Air Act).

i. *Transportation control strategies* — consider land use and transportation patterns in the strategies required to reduce or modify motor vehicle traffic and hydrocarbon emitters in metropolitan areas (Sec. 110 of Clean Air Act).

j. *Indirect source evaluations and permits* — review proposals for major traffic-generating facilities to ensure that their location, siting, and design will not cause air quality standards to be exceeded (Sec. 110 of Clean Air Act).

k. *State plans on significant deterioration of air quality* — classify areas for air quality preservation, balanced with industrial development, tailored to Statewide environmental and land use plans (Sec. 110 of Clean Air Act).

l. *Solid waste management plans and programs* — consider impacts of proposed solid waste facilities and sites on land uses, as well as land suitability of potential sites (Secs. 208 and 209 of Solid Waste Act).

m. *Environmental assessments and impact statement* — evaluate the impact of proposed municipal facilities grants and new source permits on growth, land use, and associated en-

vironmental effects (NEPA and Sec. 511 of FWPCA).

6. *EPA, in writing and in reviewing environmental impact statements, will evaluate the probable primary and secondary impacts on land use and associated environmental quality, and urges other reviewers to do so from the perspective of their interest or expertise.* This requires documentation of growth goals, potential land use changes, land suitability, and potential environmental effects.

7. *EPA, with the Federal Regional Council, will offer technical guidance and support A-95 reviews of the secondary impact of proposed projects on land use and environmental quality.* Through its planning and technical assistance programs, EPA will issue guidance to build-up the capability in State and regional A-95 planning agencies to conduct authoritative environmental evaluations early in the planning as well as in the project review stage. To assure that environmental issues associated with local and areawide land use impacts are fully aired, EPA strongly encourages State and regional A-95 planning agencies to comment independently and forcefully on potential impacts. It will give careful consideration and weight to their comments in administering municipal waste treatment grants, in issuing discharge permits, in administering air and water pollution control program support grants, in preparing environmental assessments and impact statements on waste treatment facilities and permits, and in commenting upon environmental impact statements prepared by other Federal agencies. The EPA urges the State air and water pollution control agencies to take an active role in soliciting A-95 comments.

8. *EPA will work with the States and the U.S. Bureau of Outdoor Recreation to help schedule acquisition, zoning, and tax policies to protect public access and shoreland or setting concurrently with the scheduled implementation of water, air and noise control measures.* EPA will seek coordination of State and local land protection priorities of State planning and recreation agencies with air and water clean-up schedules. It will work with the Bureau of Outdoor Recreation on demonstration water corridors.

9. *EPA will encourage the States and localities to plan for multiple use of waste treatment facilities.* They can do so in the preparation of areawide waste treatment plans, facilities plans, project siting and design, and acquisition of easements. EPA urges localities, pollution control districts and design consultants to work with State-local park and recreation agencies, conservation commissions and regional planning agencies to develop such opportunities. EPA encourages funding (50 percent) of associated open space acquisition and development under the Land and Water Conservation Fund, administered by the U.S. Bureau of Outdoor Recreation through the State outdoor recreation agencies.

10. *EPA will provide guidance to other Federal, State and regional agencies on needs and ways to protect environmentally-critical areas and productive lands.* EPA will work with other Federal agencies and urges the State environmental agencies to work with their sister agencies (recreation, fish and game, water resource and planning) to identify preservation needs and program priorities. EPA urges the States to seek priority for such areas in Federal, State and local land acquisition, in zoning, in preferential tax policies, and in locating and siting private development. It will seek mutual support through air quality planning and significant deterioration regulations. EPA, working with the States, will take advantage of the opportunities to work with:

— *The U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, State fish and game agencies* and *Conservation Commissions* in carrying out the national EPA "Wetlands Protection Policy" (and mutually supporting significant deterioration regulations).

— *The U.S. Army Corps of Engineers* and the *U.S. Dept. of Housing and Urban Development* and local agencies on implementation of flood plain zoning requirements for all Federally-assisted programs and financing under the National Flood Insurance Act of 1973.

— *The U.S. Bureau of Outdoor Recreation* and the *State outdoor recreation agencies* on potential park, recreation and open space areas.

— *The U.S. Geological Survey, State water supply agencies* and *planning agencies* concerned with protecting future water supply land and aquifers.

— *The U.S. Fish and Wildlife Service* and *Coastal Zone Management Office* on fish and wildlife habitat and estuarine systems.

— *The U.S. Dept. of Agriculture* on prime agricultural lands, that also sustain air and water quality.

11. *EPA will work with other Federal and State agencies concerned with complementary land management or regulations to control nonpoint pollution or "indirect sources".*

— EPA will work with regional (and State) counterparts in the U.S. Soil Conservation Service,

Forest Service, Extension Service and Dept. of Transportation on performance standards for construction, forestry, agriculture and road maintenance. Likewise, the State environmental agencies are encouraged to work with State agricultural, natural resources, soil conservation, construction and regulatory agencies, with Soil Conservation Districts, and with universities.

— EPA encourages the state environmental agencies to work with other State agencies, localities, and municipal leagues on measures for checking urban runoff pollution, such as street clean, oil/debris traps, and stormwater detention basins.

— EPA will develop recommendations to strengthen State and local technical assistance and regulation on siting, designing, constructing, and operating septic systems.

12. *EPA will solicit research and demonstration on relationships of environmental quality to land use patterns, policies and regulations.* It solicits próposals on environmental constraints on land use patterns, impact of facilities investment on land use patterns, land use regulations, tax policies, improved land disposal systems, and land use indices for generation of pollutants. It seeks research on land use as a common element relating air, water and solid waste management.

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