

- 8- That a water use permit and rights thereby granted may be assigned or transferred and may not be revoked or suspended for any reason other than termination of use or non-compliance with reasonable conditions imposed at the time of issuance.
  - 9- That all existing withdrawals, diversions, impoundments or consumptive uses of more than 100,000 gallons-per-day may be continued with a water use permit for which application must be made within, say, three years. Such permits will be granted provided that the use is reasonable and beneficial. Failure to so apply will create a rebuttable presumption of abandonment.
  - 10- That non-domestic ground-water users whose withdrawals create substantial adverse effects upon the domestic household wells of others shall, as a condition precedent to a water use permit, either restore such wells to their former relative capability, provide a reasonable alternative source of supply, or pay proper damages.
  - 11- Provide by law for the protection of a reasonable level of low streamflow in the interest of instream uses; for consideration of such protection as one element of the public interest in consideration of water use permits; and for recognition of the policy that the impoundment of water for the purpose of low flow augmentation for instream uses is a legitimate public purpose.
- h) Provide a clear definition of public rights for such instream uses as boating and fishing, based upon consideration of the navigational servitude and/or the public waters concept, and of the rights of riparian owners.
- 2) It is the view of the Commission that the development of a water rights and management statute should be accomplished under the guidance and direction of a representative group conversant with the water resource and the uses and needs of the people of Indiana. The Commission has developed a broad base of such knowledge and insight during the past three years. It is therefore recommended that the Commission be continued and assigned the task of developing a statute on water rights and management for consideration by the General Assembly.
  - 3) The necessary resources should be provided to the Department of Natural Resources for the development of a comprehensive plan for the development and utilization of the water resource of the state to serve the goal of meeting the needs of the people of Indiana in timely fashion by both public and private efforts.
  - 4) Accepted technical procedures should be developed by the Department of Natural Resources for consistent assessment of the yield capability of the several sources of public water supply as an aid to water utilities in the planning and development of additional supplies in timely fashion.

- 5) The Department of Natural Resources should be provided with the necessary resources to conduct and report upon continuing periodic inventories of water use in the state as an aid in assessing the further demands upon the water resource, and in determining any further public policy actions with respect thereto.

## **FLOODING**

- 6) That the existing policy of Indiana with respect to flood control, as expressed in the Indiana Flood Control Act (I.C. 13-2-22) and related statutes, continue to constitute the official public policy of the state.
- 7) That legislation be submitted to the General Assembly which would provide a more workable procedure for the "due notice" provisions of that portion of the Indiana Flood Control Act (I.C. 13-2-22-14) relating to the establishment of Commission floodways. It is proposed that "due notice" be patterned after that in existing zoning legislation; that is, by published legal notice, opportunity for public inspection of maps and other pertinent information, and public hearings.
- 8) That local zoning authorities should enact and maintain effective floodplain zoning ordinances.
- 9) That necessary financial resources be provided to the Department of Natural Resources for the development of a master plan for flood control in the state to serve not only as a source of guidance and information for local efforts but, importantly, to provide information on relative priorities and needs for use in state and other programs for alleviation of flood hazards.
- 10) That the General Assembly amend the Flood Control Revolving Fund Act (I.C. 13-2-23) so as to increase the amount of the loan fund to approximately \$5 million, to raise the maximum loan amount to \$500,000, and to make planning costs an eligible item for loans.
- 11) That the direct construction of flood control projects by the state be handled on an individual case basis, being limited generally to those projects that either afford relief on a regional basis, provide protection to state properties, or in which flood control can be incorporated in other state water resource projects. It is suggested further that this policy be reexamined upon completion of the master flood control plan, when the relative scope, urgency and need for solutions to the problem on a statewide basis are more clearly apparent.
- 12) The relatively new practice of line-item appropriations by the General Assembly for specific local flood control projects through the Department of Natural Resources should be recognized and encouraged. The Department should be the overall coordinating agency to ensure that such projects are technically and environmentally sound. Completion of the previously recommended master plan for flood control would provide valuable guidance to the Administration and the General Assembly in acting upon such local funding requests.

- 13) That priority be given to those areas having high erosion potential in the disbursement of: a) any available state funds, b) the federal Agricultural Conservation Practices Program, and c) agricultural non-point pollution control programs.

## **DRAINAGE**

- 14) The policy of recognizing and accepting the vital role and value of adequate drainage systems, both agricultural and urban, should be the continuing policy of the State of Indiana and of its citizens and institutions of government.
- 15) The drainage systems should be properly maintained on a regular and continuing basis and the duty and responsibility for such maintenance should be recognized and implemented by those responsible.
- 16) The policy of the State of Indiana should include recognition of the value of both multiple instream uses and the drainage function. The construction, reconstruction, and maintenance of drainage systems should include suitable practices that promote compatibility with other instream uses.
- 17) The State of Indiana should establish and implement an information and education program designed to assist all interests in a better understanding of the problems and needs of both agricultural and urban drainage, to promote understanding and acceptance of the multiple instream uses of major drainage systems, and to promote regular and continuing maintenance of drainage systems while adopting and utilizing drainage practices and procedures that recognize and protect other instream uses.
- 18) There should be established in law the policy that those practices and procedures in the construction, reconstruction and maintenance of legal open drains necessary for the preservation or enhancement of the public interest for recreation and fish and wildlife, be paid for by the state. A continuing source of state funds and a suitable mechanism for impementation of that policy should be established.

## **ADMINISTRATION**

- 19) The proper authorities should give priority attention to the problem of recruitment and retention of professional and technical staff through improvements in salaries, educational and career opportunities and in recruitment programs;
- 20) Adequate resources should be made available to the agencies for the collection, analysis, interpretation, and periodic publication of basic water resource data and information. Existing legislation that permits this collection and publication activity should be amended so that such activity is mandatory.

It is the unanimous view of the Commission that implementation of these recommendations would, in conjunction with existing authorities and programs, provide that framework of policy, law, and management within which the water needs of the future may be satisfied in a timely and equitable manner.

# *Appendix*

## THE EXISTING INDIANA WATER PROGRAM

The existing Indiana water program is comprised of a combination of statutory laws created by the General Assembly and certain precepts from the common law that have been modified from time to time by the courts. The following discussion is a summary of this program.

### THE STATUTORY PROGRAM

In the following summary tabulation of statutory law, the laws are cited in the same order as that in which water moves through the hydrologic cycle. An exception is made in the case of excess water, where the excess water program is presented as it pertains to flooding, drainage, erosion, and sedimentation. The program concerning each phase of the hydrologic cycle has been subdivided into six major elements. These are:

- 1) All legislative expressions of state policy on the subject;
- 2) Any statutory guidelines which might exist as to who has the right to use water, for what purposes, and on what lands;
- 3) The laws which have established the various legal bodies which actually manage water, which are divided into:
  - a) Those governmental mechanisms governing the regulation of water use,
  - b) Laws concerning water storage and distribution facilities, etc.,
  - c) Laws concerning the maintenance of water quality;
- 4) Authority for collecting basic data and conducting research;
- 5) Authority for planning; and
- 6) A summary of the various governmental units and others authorized to deal with water in the particular phase of the hydrologic cycle.

Citations are made in the following format: (I.C. 13-2-22-2), denoting Indiana Code, title 13, article 2, chapter 22, section 2. It is possible that in time the citation may change; therefore, the reader should consult the cumulative supplements of the 1976 edition of the Indiana Code, if the citation made in this report does not correspond to a later edition of the Indiana Code. The symbol N/A is an abbreviation of not-applicable.

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## Precipitation

### General Policies

By enactment of implementing legislation, the General Assembly has established the policy that the placing or attempting to place any substance into the atmosphere with the intention of inducing, increasing, decreasing, or preventing hail, precipitation, or tornados is subject to regulation to protect the public safety and welfare and the environment of the state (I.C. 13-1-1.5).

### Rights to Use

- (1) Not addressed by statute or common law.
- (2) Presumably, the owner(s) of land has the right to the direct capture and use of precipitation.
- (3) The enactment of I.C. 13-1-1.5 regulating efforts to induce, increase, decrease, or prevent hail, precipitation, or tornados may constitute implied recognition of the rights of an owner or owners of lands to modify natural precipitation in their interest.

### Management

Use N/A

### Facilities

- (1) Persons engaged in weather modification operations must be licensed by the state (I.C. 13-1-1.5).

### Quality

- (2) Specific weather modification operations must be conducted under prior permit.
- (1) No management of quality of precipitation per se.
- (2) Indirectly, through the air pollution control program (I.C. 13-1) (I.C. 13-7-2-10)

### Research and Basic Data

- (1) Certain state agencies are authorized to conduct applied research for the purpose of securing the scientific and technical data information necessary for the solution of problems involving the wise beneficial development, use and management of the water resources of Indiana (I.C. 13-2-7).
- (2) The federal government, through the National Oceanic and Atmospheric Administration, maintains an extensive nation-wide network of precipitation gaging stations, and compiles and publishes the data therefrom.
- (3) Research is conducted by a number of colleges and universities, and notably through the Water Resources Research Centers at Purdue and Indiana Universities.

### Planning

N/A

### Institutional Arrangements

- (1) Power and duty to license persons engaged in weather modification activities and to regulate specific weather modification operations by permit is vested in the Department of Natural Resources (I.C. 13-1-1.5).
- (2) Power to conduct applied water resources research in their respective areas of jurisdiction is vested in the State Board of Health and the Department of Natural Resources (I.C. 13-2-7).

## Evapotranspiration

General Policies	N/A
Rights to Use	N/A
Management	
Use	Not applicable in general sense of the term.
Facilities	Evapotranspiration can be reduced by land use and treatment measures and by evaporation suppression techniques on surface water bodies.
Quality	N/A
Research and Basic Data	Research on Indiana climatic factors affecting evaporation losses from impoundments authorized by Water Resources Research Act (I.C. 13-2-7). Also, Water Resources Research Centers at Purdue and Indiana Universities.
Planning	N/A
Institutional Arrangements	Power to conduct applied water resources research is vested in State Board of Health and Department of Natural Resources (I.C. 13-2-7).



## Soil Moisture

<b>General Policies</b>	<p>(1) It is declared, as a matter of legislative determination, that---to conserve soil and water resources---it is necessary that---appropriate soil and water conserving land use practices---be adopted and carried out---and that among such practices are---retardation of runoff by increasing absorption of rainfall (I.C. 13-3-1-2).</p> <p>(2) See Page 87, General Policy Nos. 6 and 7, and Page 90, General Policy No. 2, with respect to Excess Water (floods and drainage).</p>
<b>Rights to Use</b>	<p>Not addressed in law. Soil moisture is the natural source of supply of water for most vegetation and its utilization for such natural functions is an incident of land ownership.</p>
<b>Management</b>	<p><b>Use</b> N/A</p>
<b>Facilities</b>	<p>(1) Weather modification activities, designed to induce, increase, decrease, or prevent hail and precipitation (and hence affect the supply of soil moisture) are regulated by permit (I.C. 13-1-1.5).</p> <p>(2) See Page 78, Facilities No. 1, with respect to the artificial supplying of soil moisture (irrigation).</p>
<b>Quality</b>	<p>(1) No management of the quality of soil moisture per se.</p> <p>(2) Indirectly, the water pollution control programs are of significance.</p>
<b>Research and Basic Data</b>	<p>A program to implement an accelerated program of modern soil surveys for the state is authorized. Such surveys provide, among other things, information and data on the moisture and drainage characteristics of the various soils in the state (I.C. 13-4-3-5).</p>
<b>Planning</b>	<p>N/A</p>
<b>Institutional Arrangements</b>	<p>(1) The accelerated soil survey program is administered through the State Soil and Water Conservation Committee, Department of Natural Resources, in cooperation with the U.S. Soil Conservation Service, Purdue Extension Service and the several counties and county soil and water conservation districts.</p> <p>(2) The general soil and water conservation program is administered by the State Soil and Water Conservation Committee, Department of Natural Resources, in cooperation with the 92 county soil and water conservation districts.</p>

## Diffused Surface Water

General Policies	No express policies relative to diffused surface water per se.
Rights to Use	<p>(1) Diffused surface water flowing vagrantly over the surface of the ground shall not be regarded as public water and the owner of the land on which such water falls, pools, or flows, shall have the right to its use (I.C. 13-2-1-2).</p> <p>(2) The general common law rule is that diffused surface water belongs to anyone who captures and collects it on his land.</p>
Management	
Use	As noted above, the owner of the land has the right to capture and use diffused surface water. Thus, management of the use of such water rests solely with the landowner.
Facilities	The common method of capture of diffused surface water for use is the farm pond. Management of such facilities rests with the landowner.
Quality	None
Research and Basic Data	No special research programs per se. Diffused surface water is a factor involved in research related to drainage and erosion control.
Planning	None
Institutional Arrangements	None

## Surface Water

- (1) The general welfare of the people of the State of Indiana requires that the surface water resources of the state be put to beneficial uses to the fullest extent and that the use of water for non-beneficial uses be prevented (I.C. 13-2-1-1).
  - (2) Water in any natural stream, natural lake or other natural body of water in the State of Indiana which may be applied to any useful and beneficial purpose is a natural resource and public water of the state and subject to the control and/or regulation for the public welfare as determined by the General Assembly (I.C. 13-2-1-2). The policy that surface waters of Indiana are declared to be public waters and subject to regulations by the Indiana General Assembly shall be the accepted policy of the State of Indiana (I.C. 13-2-11-1).
  - (3) The natural resources and the natural scenic beauty of Indiana are declared to be a public right, and the public of Indiana is hereby declared to have a vested right in the preservation, protection, and enjoyment of all the public fresh water lakes of Indiana in their present state, and the use of such waters for recreational purposes (I.C. 13-2-14-1).
  - (4) The State of Indiana is hereby vested with full power and control of all of the public fresh water lakes in the state both meandered and unmeandered and the State of Indiana shall hold and control all of such lakes in trust for all of its citizens for fishing, boating, swimming, the storage of water to maintain water levels, and for any purposes for which said lakes are ordinarily used and adapted, and no person owning lands bordering any such lakes shall have exclusive right to the use of the waters of any such lake or any part thereof (I.C. 13-2-11-1).
  - (5) The water resources of the state should be accumulated, preserved and protected to prevent any loss or waste beyond the reasonable and necessary use thereof (I.C. 13-2-22-2).
  - (6) It is the public policy of the State of Indiana that a natural, scenic and recreational river system be established and maintained (I.C. 13-2-26-2).
  - (7) It is hereby declared to be the policy of the General Assembly to provide for--the conservation, development, utilization and disposal of water in the watersheds of the state (I.C. 13-1-3-2).
  - (8) The Department of Natural Resources shall have general charge and supervision of the navigable waters of the state (I.C. 14-3-1-14).
  - (9) All lands now owned by the State of Indiana which border upon or lie adjacent to any lake or stream and which are not otherwise used or occupied or intended for use or occupation by any institution, department or office of the state government, shall be under the management, control and supervision of the Department of Natural Resources (I.C. 14-3-10-1).
  - (10) The General Assembly has recognized the need for reservoirs to meet the increasing demand for water supply storage to be used for thirteen enumerated purposes, and has provided the means by which the State of Indiana, municipalities, special taxing districts, and public utilities may secure needed reservoir sites (I.C. 13-2-9-1).
  - (11) It is the declared public policy of this state to protect and conserve the timber, water resources, wildlife and top soil in the state forests (I.C. 14-3-4-1).
- (1) Rights to use the surface water resources of the state are generally governed by the riparian doctrine of reasonable use.

(2) Land owners contiguous to a public water course have the right at all times to use water therefrom in the quantity necessary to satisfy domestic needs and the use of water for domestic purposes shall have priority and be superior to any and all other uses. The owner or group of owners of land contiguous to or encompassing a public water course may impound water behind a dam in the natural stream bed or on its land or by pumping or diverting such water from a stream or lake to a reservoir when the flow of the stream or the level of the lake is in excess of existing reasonable uses at the time of such impoundments. Finally, any person who creates additional stream volumes by releases from impoundments built and financed by them shall have the right to use of such increased flowage at all times and riparian owners shall have no rights in such increased flowage beyond normal stream flow (I.C. 13-2-1-3).

(3) Any person whether or not a riparian owner, may divert flood waters of any water course for any useful purpose provided that such diversion shall not cause any injury to landowners or the users of water in the watershed of the water course from which the flood flow is diverted (I.C. 13-2-1-6).

Management

Use

(1) Under the riparian doctrine, management of the use of surface water is generally vested in the riparian owner and the recourse for disputes is to the courts.

(2) The Natural Resources Commission is authorized to contract to provide minimum quantities of stream flow or to sell water for supply purposes from impoundments financed by the state (I.C. 13-2-1-7).

(3) Whenever a dispute arises between the users of surface water in any watershed area, any party to the dispute may request that the Department of Natural Resources mediate the dispute. Any recommendations of the Department in any such mediation proceeding shall not be binding upon the parties to the dispute (I.C. 13-2-1-6).

(4) A permit must be acquired from the Natural Resources Commission in order to withdraw water from a navigable stream in the state (I.C. 14-3-1-14).

(5) Cities may regulate the withdrawal of water from water courses within a distance of 10 miles from their corporate limits, but not into a county other than the one which the city hall is located (I.C. 18-1-1.5-9).

(6) Any municipal corporation, county or any combination or municipal corporations, county or counties may create a port authority (I.C. 8-10-5-1).

(7) County commissioners are authorized, upon petition of 24 freeholders of the county in the vicinity of the stream, to declare any stream or water course in the county navigable (I.C. 13-2-4-1).

Facilities

(1) The General Assembly has provided the means by which the State of Indiana, municipalities, special taxing districts, and public utilities may secure needed reservoir sites to meet present and future needs for storage of water, even though there may be no present, immediate need (I.C. 13-2-9-1).

(2) Owners of land contiguous to or encompassing a public water course may impound water behind a dam in the natural stream bed or on its land or by pumping or diverting such water from a stream or lake to a reservoir when the flow of the stream or level of lake is in excess of existing reasonable uses at the time of such impoundments. These actions must be approved by the Natural Resources Commission (I.C. 13-2-1-3).

(3) Any structure, obstruction, deposit, or excavation in the floodway of any stream in the state must first be approved by the Natural Resources Commission (I.C. 13-2-22-13).

- (4) The Natural Resources Commission is authorized to purchase or condemn easements or fee simple interests in land necessary for reservoirs for storage of water, and to construct and otherwise develop necessary structures for impoundments of water on such sites (I.C. 13-2-9-2).
  - (5) Sites for water supply storage must be approved by the Natural Resources Commission and the Board of Health before condemnation can be used (I.C. 13-2-9-7).
  - (6) The Environmental Management Board is authorized to classify all water and waste water treatment plants as to qualifications for their operation (I.C. 13-1-6-1), establish requirements for permits for the construction of public water supply facilities (I.C. 13-7-10-1), and approve the plans and specifications prior to the construction of a public water supply facility (I.C. 13-7-14-1).
  - (7) Any dam which meets certain criteria must be inspected annually by representatives of the Natural Resources Commission (I.C. 13-2-20-4).
  - (8) Pursuant to numerous provisions of the Indiana Code (I.C. 19-3-6.5 thru 35), cities and towns have authority to construct, operate and maintain public water supply systems.
  - (9) Rural water companies may be organized pursuant to the Indiana Not-For-Profit Corporation Act (I.C. 23-7-1.1) for the purpose of providing water supply, including treatment and distribution for public use.
  - (10) Investor owned public water utilities, organized pursuant to the corporation laws of the state and operating under an indeterminate license, permit or franchise issued by the Public Service Commission (I.C. 8-1-2-9) thru 93) may construct, operate and maintain public water supply systems.
  - (11) Regional Water Districts may provide a water supply, including treatment and distribution for domestic, industrial and public use (I.C. 19-3-2-3).
  - (12) Conservancy Districts may provide water supply, including treatment and distribution for domestic, industrial and public use (I.C. 19-3-2-3)
  - (13) The Indiana Port Commission is authorized and empowered to construct, maintain, and operate, in cooperation with the federal government, modern ports on Lake Michigan and/or the Ohio River and/or the Wabash River (I.C. 8-10-1-1).
  - (14) The Indiana Port Commission, in cooperation with the federal government or otherwise, is authorized to construct a new canal or canals or to improve any existing canal or canals, river or other waterway in such manner as to accommodate water-borne transportation and to construct the necessary facilities in connection therewith, subject to the conditions and limitations set forth in the Act (I.C. 8-10-2-1).
- Quality
- (1) The Environmental Management Board has a general charge to preserve, protect, and enhance the quality of the state's environment and to develop programs that provide for most beneficial use of its resources (I.C. 13-7-1-1).
  - (2) Although its authority would appear to be largely superseded by I.C. 13-7, I.C. 13-1-3, and I.C. 16-1-26-1, the Natural Resources Commission is empowered to protect the lakes, streams, and springs of the state against impurities or pollution by industrial, municipal or other sewage waste (I.C. 14-3-1-14).
  - (3) The Environmental Management Board is given the specific duty, among others, to evolve standards and develop regulations to preserve, protect, and enhance the quality of the environment (I.C. 13-7-3-1).

(4) The Stream Pollution Control Board, operating under the general overview of the Environmental Management Board, has been granted the jurisdiction to control and prevent pollution in the waters of the state (I.C. 13-1-3-4). This involves the determination of qualities or properties which indicate pollution and developing regulations and orders which restrict the discharge of polluting substances into the waters of the state (I.C. 13-1-3-7).

(5) It is unlawful to deposit any substance into the waters of the state which is deleterious to public health, the prosecution of any industry or lawful occupation, agriculture, floriculture or horticulture, the livestock industry or use for domestic animals, or which lessens, impairs or materially interferes with the use of the water by the state or any political division of it, or which destroys or jeopardizes any beneficial animal, fish, or vegetable life in the waters (I.C. 16-1-26-1 and I.C. 13-1-3-8).

(6) The proper reclamation of lands subjected to surface mining is required to protect lakes and streams from pollution (I.C. 13-4-6-1).

#### Research and Basic Data

(1) The Natural Resources Commission is authorized to conduct investigations and measurements of the water resources of the state (I.C. 13-2-8-1).

(2) The Natural Resources Commission is authorized to investigate, compile, and disseminate information and make recommendations concerning the state's Natural Resources (I.C. 14-3-1-3), and make research data and reports available to public or private institutions or individuals (I.C. 14-3-1-3, 4)

(3) The Board of Health and Natural Resources Commission are to conduct research necessary for beneficial development, use, and management of the state's water resources (I.C. 13-2-7-2).

(4) The Water Resource Research Centers, Purdue and Indiana Universities, are engaged in research into numerous aspects of water resources.

#### Planning

(1) The Natural Resources Commission shall make surveys and investigations of the water resources of this state, giving consideration to the need for, and appropriate sources of, suitable water supplies for domestic, agricultural, municipal, industrial, power, transportation, recreation, stream pollution, health and other beneficial purposes and shall make and formulate plans and recommendations for the further development, protection and preservation of the water resources of the state for such purposes (I.C. 13-2-22-11).

(2) The Stream Pollution Control Board, pursuant to Section 208, PL 92-500, is engaged in the development of a state-wide water quality management plan.

#### Institutional Arrangements

(1) The Natural Resources Commission must approve any structure, obstruction, deposit, or excavation in the floodway of any stream in the state prior to construction (I.C. 13-2-22-13).

(2) The Natural Resources Commission is authorized to acquire reservoir sites for the storage of water (I.C. 13-2-9-2).

(3) The Environmental Management Board has a general charge to preserve, protect, and enhance the quality of the state's environment and to develop programs which provide for the most beneficial use of its resources (I.C. 13-1-3-4).

(4) The Stream Pollution Control Board, operating under the general overview of the Environmental Management Board, has been granted the jurisdiction to control and prevent pollution in the waters of the state (I.C. 13-1-3-4).

(5) Cities may regulate the withdrawal of water from water courses within a distance of 10 miles from their corporate limits (I.C. 18-1-1.5-9).

- (6) Organized Conservancy Districts may provide water supply, including treatment and distribution for domestic, industrial and public use (I.C. 19-3-2-2).
- (7) Regional water districts may provide water supply for domestic, industrial and public use (I.C. 19-3-1-1).
- (8) Cities and towns may provide public water supplies, including treatment and distribution (I.C. 19-3-6.5 thru 35).
- (9) Rural water companies may provide water supply for public use.
- (10) Investor-owned public utilities may construct, operate and maintain public water supply systems under license, permit or franchise from the Public Service Commission (I.C. 8-1-2-91 thru 93).
- (11) The Indiana Port Commission is authorized to construct, maintain, and operate modern ports on Lake Michigan, and/or the Ohio River and/or the Wabash River (I.C. 8-10-1-1).
- (12) The County Commissioners are authorized, upon petition of 24 freeholders of the county in the vicinity of the stream, to declare any stream or water course in the county navigable (I.C. 13-2-4-1).
- (13) Any municipal corporation, county or any combination of municipal corporations, county or counties may create a port authority (I.C. 8-10-5-1).

## Ground Water

### General Policies

- (1) It is the policy of the state to conserve and protect the ground-water resource and to provide regulations for its most beneficial use and disposition (I.C. 13-2-2-2).
- (2) The Natural Resources Commission is authorized to require the reduction of flow from flowing wells in order to prevent the loss or waste of potable water not being put to beneficial use (I.C. 13-2-3-1).
- (3) It is unlawful to accelerate the natural flow or the production of an unnatural flow of certain mineral waters (I.C. 13-2-6-1).
- (4) It is the policy of the state to provide for the comprehensive environmental development and control on a state-wide basis in order to preserve, protect, and enhance the quality of the environment and to assure, to the extent possible, clean air, clean water and a healthful environment for future generations (I.C. 13-7-1-1).
- (5) The Stream Pollution Control Board shall have jurisdiction to control and prevent pollution in waters of this state (I.C. 13-1-3-4).
- (6) It is the policy of the state to protect waters and lands in the state against pollution and the loss of impairment of water resources, and to that end to provide additional means whereby abandoned or leaking oil and/or gas, or salt water injection wells may be plugged, replugged or repaired by or under authority and direction of the Department of Natural Resources (I.C. 13-4-4-1).
- (7) It is hereby declared that it is in the public interest for the state to provide the means whereby test holes for or in connection with fluid disposal investigation, mineral resources investigation, engineering projects investigation or geologic investigations are drilled, utilized and plugged in such manner as to prevent pollution, impairment and/or waste of natural resources (I.C. 13-4-5-1).
- (8) Oil and gas operators must file bonds to ensure the proper plugging of oil and gas wells, dry holes and test holes to confine permanently all oil, gas, and water in the separate strata originally confining them (I.C. 13-4-7).

### Rights to Use

- (1) A modified absolute ownership doctrine which does not restrict the use of ground water by the owner of the land above it except when it is used in a malicious or wasteful manner.

### Management

#### Use

- (1) It is the policy of the state to conserve and protect the ground water resources and provide regulations for its most beneficial use and disposition (I.C. 13-2-2-2), thus the Natural Resources Commission is authorized to designate restricted use areas, so withdrawal of ground water does not exceed the natural replenishment of the source (I.C. 13-2-2-3).
- (2) The Natural Resources Commission is authorized to require reduced flow from flowing wells to prevent loss or waste of water not being put to beneficial use (I.C. 13-2-3-1). Also, the Commission requires one to obtain a permit before injecting potable water in underground formations which contain nonpotable water (I.C. 13-2-3-2).

### Facilities

- (1) All well-drilling contractors are required to obtain a permit from the Natural Resources Commission (I.C. 25-39-1-1).
- (2) County Commissioners may enact ordinances and regulations to control the location, construction, or repair of all wells located within the county. Cities and towns may do the same within their jurisdiction (I.C. 17-2-22-4.5).



## Quality

- (1) The Stream Pollution Control Board is authorized to control and prevent pollution in waters of the state with any substance deleterious to public health or to the prosecution of any industry or lawful occupation, or destructive or injurious to fish life or to any beneficial animal or vegetable life (I.C. 13-1-3-4).
- (2) The Environmental Management Board is to develop policies to provide for the comprehensive environmental development and control on a state wide basis in order to preserve, protect, and enhance the quality of the environment and to assure, to the extent possible, clean air, clean water and a healthful environment for future generations (I.C. 13-7-1-1).
- (3) Oil and gas operators must file bonds to ensure the proper plugging of oil and gas wells (I.C. 13-4-7).
- (4) It is the policy of the state to protect waters and lands in the state against pollution and the loss or impairment of water resources, and to that end to provide additional means whereby abandoned or leaking oil and/or gas, or salt water injection wells may be plugged, replugged or repaired by or under authority and direction of the Department or Natural Resources (I.C. 13-4-4-1).
- (5) Permits are required for test holes for fluid disposal, mineral resources, engineering projects and geologic investigations, including provisions for the proper plugging thereof (I.C. 13-4-4-1).

## Research and Basic Data

- (1) The Department of Natural Resources may designate an area as a restricted use area for ground water. Such designation is subject to prior surveys of ground water in the area and a determination of safe annual yield (I.C. 13-2-2-3).
- (2) The Water Resources Research Act of 1965 provides for necessary water resources research programs and studies; and the administration and execution of those programs (I.C. 13-2-7-1 thru 4).
- (3) This Act authorizes the investigation and measurement of water resources by the Department of Natural Resources either directly or in cooperation with appropriate federal agencies (I.C. 13-2-8-1).

## Planning

- (1) The Flood Control Act calls for overall water resources planning which would include ground water since it is considered a water resource (I.C. 13-2-22-1 thru 12).

## Institutional Arrangements

- (1) A permit must be acquired from the Natural Resources Commission in order to inject, pump, or otherwise induce potable water into underground formations which contain non-potable water (I.C. 13-2-3-2).
- (2) The Environmental Management Board (EMB) has a general charge to preserve, protect, and enhance the quality of the state's beneficial use of its resources. Therefore, the EMB is authorized to classify all water and wastewater systems (I.C. 13-1-6-1), adopt rules, regulations and standards at least as stringent as applicable standards and any contaminants into state waters (I.C. 13-7-10-3).
- (3) The EMB is to encourage, assist, and advise local governmental units in developing facilities or establishing standards for, among other things, water pollution control, including waste treatment (I.C. 13-7-15-2).
- (4) The Stream Pollution Control Board (SPCB), operating under the general overview of the Environmental Management Board, has been granted the jurisdiction to control and prevent pollution in the waters of the state (I.C. 13-1-3-4).
- (5) The Natural Resources Commission is empowered to protect the lakes, streams and springs of the state against impurities or pollution by industrial, municipal or other sewage waste (I.C. 14-3-1-14).

- (6) The Natural Resources Commission is authorized to require reduced flow from flowing water wells to prevent loss or waste of potable water not being put to beneficial use (I.C. 13-2-3-1).
- (7) A contractor is required to obtain a renewable annual license from the Department of Natural Resources for drilling water wells (I.C. 25-39-1-1).
- (8) County Commissioners may enact ordinances and regulations to control the location, construction, or repair of all wells located within the county. Cities and towns may do the same within their jurisdiction (I.C. 17-2-22-4.5).

## Erosion and Sedimentation

### General Policies

- (1) The State has declared, as a matter of legislative determination, that the state's land and water resources are basic assets which must be preserved to protect and promote the health, safety, and general welfare of the people (I.C. 13-1-3-2).
- (2) It is hereby declared to be the policy of the General Assembly to provide for the conservation of the soil and water resources of this state, and for the control and prevention of soil erosion, and for the prevention of flood water and sediment damages--(I.C. 13-3-1-2). By enactment of enabling legislation, the General Assembly has established the policy that lands subjected to surface mining should be reclaimed to prevent or minimize injurious effects to the people and natural resources of the state, including (among other objectives) the need to protect lakes and streams from pollution and to decrease soil erosion (I.C. 13-4-6-1; I.C. 14-4-2-1).
- (3) The State recognizes the need for water management in the form of new drainage projects to make land suitable for agriculture, homes, or industry; new facilities to dispose of sewage and other liquid wastes in order to prevent the pollution of rivers and streams or the overtaxing of the soil's natural filtering process; the reestablishment of ground cover to protect top soil, to prevent siltation of rivers and lakes, or to provide a natural habitat for wildlife; and the reestablishment of the natural recreational facilities associated with water so that more of the public may enjoy it (I.C. 19-3-2-1).

### Rights to Use

N/A

### Management

#### Use

N/A

#### Prevention and Control

- (1) The Natural Resources Commission is empowered to grant, suspend, revoke, modify, or release permits for surface mining (I.C. 13-4-6-3).
- (2) Police powers are used to provide for conservation and improvement of strip mine areas (I.C. 13-2-25-1)
- (3) State agencies with duties of public highway construction and maintenance are authorized to protect such highways against the waters of streams, watercourses, ditches, and drains when the stream is causing or threatening to cause damage by erosion, wash, slides, change of course or overflow (I.C. 13-2-25-1).
- (4) County soil and water conservation districts are authorized to carry out preventive and control measures on specified lands and to otherwise cooperate with, support and encourage soil and water conservation, erosion control, flood prevention, and outdoor recreation measures and projects on private lands within the district (I.C. 13-3-1).
- (5) Conservancy districts can pursue flood prevention and control, drainage improvements, forest development, wildlife areas and parks and recreational facilities where feasible in connection with beneficial water management, prevention of loss of top soil from injurious water erosion, storage of water for augmentation of stream flow, and operation, maintenance, and improvement of any existing work of improvement for water based recreational activities among other activities (I.C. 19-3-2).

## Quality

- (1) Erosion and sedimentation do impact upon land and water quality. Sediment is regarded as a pollutant in water. Management tools used to prevent erosion and sedimentation from occurring, and thus affecting quality, are listed above. The development of non-point pollution control plans (including erosion and sedimentation) pursuant to Section 208 of P.L. 92-500 is in progress.

## Research

## Basic Data and Planning

- (1) The State Soil and Water Conservation Committee is authorized to provide support and assistance to the local soil and water conservation districts by granting funds and by coordination and consultative services (I.C. 13-4-3-8).
- (2) The DNR is directed to utilize appropriated funds to expand the small watershed program, which includes land treatment measures (I.C. 13-4-3-9).
- (3) Soil and water conservation districts are charged to cooperate with the state or its agencies in conducting surveys, investigations, and research relating to the character of soil erosion and water losses and the preventive and control (measures) needed, in publishing the results of such research, and in disseminating information concerning such preventive and control measures; and to cooperate with the state or its agencies in conducting demonstrational projects to show by example the means, methods, and measures by which soil and water resources may be conserved, floods prevented, and soil erosion prevented and controlled (I.C. 13-3-1-8).

## Institutional Arrangements

- (1) The DNR, through the State Soil and Water Conservation Committee, provides assistance and support to local soil and water conservation districts through appropriated funds (I.C. 13-4-3-8).
- (2) The DNR, through the State Soil and Water Conservation Committee, assists the small watershed planning program through use of appropriated funds (I.C. 13-4-3-10).
- (3) The Natural Resources Commission is empowered to grant, suspend, revoke, modify, or release permits for surface mining (I.C. 13-4-6-3).
- (4) The State Soil and Water Committee was established to assist supervisors of soil and water conservation districts and conduct other functions (I.C. 13-3-1-4).
- (5) Soil and Water Conservation Districts are governmental subdivisions of the State and carry out the functions assigned them (I.C. 13-3-1-8).
- (6) Conservancy districts are established to conduct activities as outlined in (I.C. 19-3-2-1) and in "Prevention and Control" above (I.C. 19-3-2-3).

## Drainage

### General Policy

- (1) By enactment of enabling legislation, the General Assembly has established policy for the construction, reconstruction, and maintenance of all legal drains.
- (2) It is illegal to undertake any drainage activities which might cause the lowering of the water level in public fresh water lakes (I.C. 13-2-17-1).
- (3) It is unlawful to conduct any activity in the floodway of any watercourse of the state which will adversely affect efficiency or restrict the capacity of the floodway, constitute a hazard to the safety of life or property, or have detrimental effects upon fish, wildlife and botanical resources. Therefore, any person wishing to undertake any construction activities on any floodway must first obtain approval from the Natural Resources Commission; however, approval is not needed for projects on those streams or legal drains in agricultural areas where the total length of the specific stream or legal drain is ten miles or less (I.C. 13-2-22-13).
- (4) Cities have been granted the power to establish, maintain and control watercourses within a distance of ten miles from the corporate limits but not beyond the county line in which the city hall is located. These powers include the ability to dam, widen, straighten, dredge, change the channels of or remove an obstruction in any watercourse (I.C. 13-1-1.5-9).
- (5) Fifty-one percent of the frontage land owners bordering on any non-navigable stream may petition their county commissioners requesting that a portion of the stream between two designated points be cleaned out or improved to provide adequate capacity (I.C. 17-2-29-1).
- (6) Conservancy Districts can be established to undertake activities for improving drainage (I.C. 19-3-2-1).
- (7) Soil and Water Conservation Districts have been established in Indiana to promote wise and efficient use of the state's land and water resources, including measures such as flood preventing reservoirs and channels, terraces, terrace outlets, check dams, dikes, ponds, ditches and the like (I.C. 13-3-1-2).

### Rights to Use

- (1) The use of diffused surface water, frequently the reason for drainage work, shall not be regarded as public water and the owner of the land on which such water falls, pools, or flows, shall have the right to its use (I.C. 13-2-1-2). This is also the common law rule in Indiana.
- (2) High ground water levels are also a reason for drainage work. The rule in Indiana appears to be that the use of ground water by the overlying owner is not restricted except when it is used in a malicious or wasteful manner.
- (3) Once either diffused surface water and/or ground water is collected in a watercourse, its use is governed by the riparian doctrine of reasonable use.

### Management

#### Use

- (1) Management of the use of diffused surface water is by the land owner.
- (2) Management of the use of ground water is by the land owner.
- (3) Management of the use of water in streams and watercourses is by the riparian owner and recourse for settlement of questions of reasonable use is to the courts.

## Construction and Maintenance

- (1) Each county has a county drainage board which has primary responsibility for the construction, reconstruction, and maintenance of all legal drains except in areas where they have relinquished this responsibility to cities, towns, sanitary districts, conservancy districts, and any legal entity responsible for flood control and drainage (I.C. 19-4-1-1 thru (I.C. 19-4-1-5).
- (2) Each county has a County Surveyor whose duties are to investigate, evaluate, and survey all legal drains and prepare reports, plans and profiles necessary for proposed improvements (I.C. 19-4-1-9).
- (3) The County Surveyor is responsible for removing any obstructions from legal drains and repairing damage (I.C. 19-4-6-2).
- (4) If obstruction or damage is caused by an owner of land affected by the land, the owner will be required to remove the obstruction and repair the damage (I.C. 19-4-6-3).
- (5) If the connection of a private drain would cause or add to pollution of the receiving waters, written approval must be obtained from the Stream Pollution Control Board and filed with the county drainage board (I.C. 19-4-6-7).
- (6) Any person wishing to undertake any construction activities on any floodway must first obtain approval from the Natural Resources Commission; however, approval is not needed for projects on those streams or legal drains in agricultural areas where the total length of the specific stream or legal drain is 10 miles or less (I.C. 19-4-6-7).
- (7) Fifty-one percent of the frontage land owners bordering on any non-navigable stream may petition their county commissioners requesting that a portion of the stream between two designated points be cleaned out or improved to provide adequate capacity (I.C. 17-2-29-1).

## Quality

- (1) If the connection of a private drain would cause or add to pollution of the receiving waters, written approval must be obtained from the Stream Pollution Control Board and filed with the county drainage board (I.C. 19-4-6-7).
- (2) If the Board of Sanitary Commissioners finds that a river, stream or other watercourse is being polluted, it may study the feasibility of building a sewage treatment plant and adopt a resolution stating the necessity for such a plant (I.C. 19-2-14-9).
- (3) Water in surface drains is surface water subject to the water pollution control jurisdiction of the Stream Pollution Control Board.

## Planning

- (1) Each county has a County Surveyor whose duties are to investigate, evaluate, and survey all legal drains and prepare reports, plans, and profiles necessary for proposed improvements (I.C. 19-4-1-9).
- (2) In the drainage code, the General Assembly has provided a statutory framework for the construction and regulation of sewers and drains in first and second class cities.
- (3) The Board of Sanitary Commissioners has concurrent power with the Board of Public Works to construct and maintain main sewers and submain sewers and to construct and maintain storm sewers (I.C. 19-2-21-1 and 19-2-22-1).

## Institutional Arrangements

- (1) The Drainage Code provides for county drainage boards to be created in each county of the state to have jurisdiction over all "legal drains" (I.C. 19-4-5-1).
- (2) In addition to the drainage board, each county has a County Surveyor whose duties are to investigate, evaluate, and survey all legal drains and prepare reports, plans, and profiles necessary for proposed improvements (I.C. 19-4-1-9).

- (3) Private drains may be connected with legal drains if permission is granted by the County Surveyor. But, if the connection would cause or add to pollution of receiving waters, written approval must be obtained from the Stream Pollution Control Board and filed with the county drainage board (I.C. 19-4-6-8 and 19-4-6-7).
- (4) Any owner of land affected by a final order or determination of a drainage board is entitled to judicial review (I.C. 19-4-8-1 to 7).
- (5) The Boards of Public Works of such cities have the power to construct, reconstruct, maintain, repair and regulate use of sewers and drains within their territorial limits (I.C. 19-2-11-1).
- (6) Insofar as the Department of Sanitation of a first or second-class city has power over sewers and drains, its power is not exclusive, but concurrent with the Board of Public Works (I.C. 19-2-11-3).
- (7) The Board of Sanitary Commissioners has concurrent power with the Board of Public Works to construct and maintain main sewer and submain sewers and to construct and maintain storm sewers (I.C. 19-2-21-1 and I.C. 19-2-22-1).

## Floods

### General Policy

- (1) It is hereby declared (a) that the loss of lives and property caused by floods, and the damage resulting therefrom, is a matter of deep concern to the state affecting the life, health and convenience of the people and the protection of property; that to prevent and limit floods all flood control works and structures, the alteration of natural or present water courses of all rivers and streams in the state should be regulated, supervised and coordinated in design, construction and operation according to sound and accepted engineering practices so as to best control and minimize the extent of floods and reduce the height and violence thereof; (b) that the channels and that portion of the flood plains of rivers and streams, which are the floodways, should not be inhabited and should be kept free and clear of interference or obstructions which will cause any undue restriction of the capacity of the floodways;---(d) that a master plan or comprehensive plan for the entire state, to control floods, and to accumulate, preserve and protect the water resources, should be investigated, studied and prepared; policy and practices established, and the necessary works constructed and placed in operation (I.C. 13-2-22-2).
- (2) It is hereby declared to be the policy of the general assembly to provide for the conservation of the soil and water resources of this state, and for the control and prevention of soil erosion, and for the prevention of flood water and sediment damage and for the conservation, development, utilization and disposal of water in the watersheds of the state, thereby to preserve natural resources, control floods, prevent impairment of dams and reservoirs, assist in maintaining the navigability of rivers and harbors, preserve wildlife, protect and promote the health, safety, and general welfare of the people of this state (I.C. 13-3-1-2).
- (3) The management of water being necessary to the welfare of Indiana, it is the policy of this act (Conservancy District Act)---to provide in one act a general procedure through which each of the various legitimate purposes, authorized in section 3 (includes flood prevention and control) may be attained where they are needed (I.C. 19-3-2-1).
- (4) The enactment of a number of acts enabling the construction of flood control works by state agencies, counties, cities and towns, and special districts is indicative of general state policy in support of flood prevention and control in the interest of the public health, safety and welfare.

### Rights to Use

- (1) In the general case, flood water is a part of surface water (water in lakes and watercourses) and rights to its use are governed by the riparian doctrine of reasonable use.
- (2) If flood water from a watercourse escapes its natural channel never to return, but instead spreads over adjacent land, running in different directions or settling in pools or flats, it ceases to be a part of the watercourse and is considered diffused surface water. As such, the owner of the land has the right to its use. (I.C. 13-2-1-2).
- (3) Subject to prior state approval, any person, whether or not the owner of lands contiguous to or encompassing any watercourse, may divert the flood water of any watercourse for any useful purpose, including the purpose of storage (I.C. 13-2-1-6(1)).

### Management

#### Use

- (1) Management of riparian uses is by the individual riparian. Recourse for questions as to use and reasonableness thereof is directly to the courts.
- (2) If flood water subsequently becomes diffused surface water, its management is by the land owner.
- (3) The diversion of the flood water of a watercourse is subject to prior approval by the state (I.C. 13-2-1-6).

NOTE: The major public concern with floods has been historically, and yet remains, in the area of the elimination or mitigation of flood damages arising from occupation and use of the flood plains. This concern has been expressed in a number of statutory enactments providing the basis for both regulatory and management measures for flood prevention and control at both state and local levels. These measures are classified generally as structural and non-structural (flood plain management), and are so treated herein.



## Prevention and Control

### Structural Measures - State

- (1) The NRC may construct flood control works or any part thereof and may do so in cooperation with agencies of this state, other states or the United States (I.C. 13-2-22-11).
- (2) The NRC shall procure and obtain flood control works from and through or by cooperation with agencies of the United States, by cooperation with and action of the cities and towns under the laws of the state relating to flood control, and by cooperation with and action of landowners in rural areas affected thereby, under the laws of the state related to levees (I.C. 13-2-22-11) (I.C. 13-2-22-12).
- (3) The Natural Resources Commission is authorized and empowered to represent and act for and in behalf of the State of Indiana, subject to the approval of the governor, in all matters of flood control and water resources of the state with the United States or any agency thereof, and with any other state or agency thereof; to cooperate with and obtain, approve and/or accept any flood control works from and through the Corps of Engineers; and to cooperate with and obtain, approve and/or accept any works or grants of any character or description from or through any agency of the United States relating to flood control and water resources, and to administer the expenditures of funds in connection therewith (I.C. 2-22-12).
- (4) The state or any agency thereof may, with the approval of the governor, give, grant or convey to any person, easements, rights of way and right and privilege to construct, maintain and operate any works or structures in connection with flood control or water resources on lands in which the state has any right, title or interest (I.C. 13-2-22-12).
- (5) No person shall construct or install any works of any nature for flood control and no court shall enter the final order establishing and ordering such works constructed, unless and until the proposed works and the plans and specifications therefor are approved by the Natural Resources Commission (I.C. 13-2-22-5) (I.C. 13-2-24-1).

### Non-structural Measures (Flood Plain Management) - State

- (1) The Natural Resources Commission shall make studies of the area of the state affected by floods -- determine the best method and manner of establishing flood control, giving consideration to --- the flood plain regulation method (I.C. 13-2-22-11).
- (2) It shall be unlawful to erect, use or maintain in or on any floodway, a permanent abode or place of residence (I.C. 13-2-22-13).
- (3) Any person desiring to erect, make, use or maintain, suffer or permit, a structure, obstruction, deposit or excavation to be erected, made used or maintained in or on any floodway shall first file a verified written application with the (Natural Resources) commission---and such person must receive the written authorization of the commission therefor prior to construction (I.C. 13-2-22-13).
- (4) The (Natural Resources) commission may by order establish a floodway as a commission floodway and alter, change, or revoke and terminate the same (I.C. 13-2-22-14).
- (5) The (Natural Resources) commission is authorized and directed to promulgate---appropriate rules and regulations, including consideration of non-conforming uses, as minimum standards for the delineation and regulation of all flood hazard areas within the state of Indiana (I.C. 13-2-22-5-2).
- (6) On and after July 1, 1974, local flood plain ordinances, rules and regulations are subject to review and approval by the (Natural Resources) commission for compliance with the state-established minimum standards for the delineation and regulation of flood hazard areas (I.C. 13-2-22-5-3).

- (7) The (Natural Resources) commission is authorized to provide technical data and information and otherwise assist any local unit in the identification and delineation of all flood hazard areas within the jurisdiction of that local unit, and in the preparation of all necessary ordinances, rules and regulations (I.C. 13-2-22.5-4).
- (8) Loans from the flood control revolving fund may be made to local units of government for the purpose of the establishment of floodways (I.C. 13-2-23).

#### **General Measures - State**

- (1) The (Natural Resources) commission shall encourage and promote local initiative and effort in providing flood control---and shall cooperate with, advise, disseminate information to, assist any person or agency in this state in matters relating to flood control (I.C. 13-2-22-11).
- (2) The Department of Conservation (Natural Resources) shall have power to investigate, compile and disseminate information and make recommendations concerning the natural resources of the state and their conservation; including---flood prevention (I.C. 14-3-1-3).
- (3) The (Natural Resources) commission shall have jurisdiction over the private and public waters in the state and the lands adjacent thereto necessary for flood control purposes or for the prevention of flood damage (I.C. 13-2-22-11).
- (4) The (Natural Resources) commission, its agents, engineers, surveyors and other employees may enter upon any lands or waters in the state for the purpose of making any investigation, examination, or survey contemplated hereby (flood control and water resources) (I.C. 13-2-22-7).
- (5) The (Natural Resources) commission shall make a comprehensive study and investigation---of the areas of the state affected by floods---determine the best method and manner of establishing flood control---adopt and establish a comprehensive plan or master plan for flood control---determine the best and most practical manner of establishing and constructing the necessary flood control works; and adopt appropriate measures for the prevention of flood damage (I.C. 13-2-22-11).
- (6) The (Natural Resources) commission shall have the right to exercise the power of eminent domain for its purposes (I.C. 13-2-22-10), and for acquisition of lands for reservoirs for storage of water for flood prevention and control (I.C. 13-2-9).
- (7) The (Natural Resources) commission, on behalf of the state, or any municipality, special taxing district, or public utility, which by other provisions of law has the right or duty to supply or store water for certain stated purposes (including flood prevention and control) may acquire by purchase (including condemnation) lands necessary for such water storage (I.C. 13-2-9.3).
- (8) The administration of the Flood Control Revolving Fund is vested jointly in the State Board of Finance and the (Natural Resources) commission (I.C. 13-2-23.2).

#### **Structural Measures - Local**

- (1) The State of Indiana, municipalities, special taxing districts, and public utilities may secure reservoir sites for purposes which include flood prevention and control (I.C. 13-2-9.1). Further, the Natural Resources Commission (NRC) is directed to encourage and promote local initiative in providing flood control and the development of water resources and to assist any person or agency in doing so (I.C. 13-2-22-11).

- (2) Subject to the approval of the NRC and the State Board of Finance any municipality may borrow funds up to \$100,000 from the Flood Control Revolving Fund for the purpose of instituting, accomplishing and administering any flood control program (I.C. 13-2-23-1).
- (3) Cities of the 2nd, 3rd, 4th, and 5th class may, by petition to the circuit court of the county, establish flood control districts for the purpose of undertaking flood control and relief projects (I.C. 19-4-18-2). Cities of the 1st class (Indianapolis) may create a department of flood control (I.C. 19-4-21-1). Also, cities of the 2nd, 3rd, 4th, and 5th class may construct levees when the Board of Public Works or the common council determine that this action is necessary for the protection of the city (I.C. 18-1-10-1). Any person lawfully authorized to maintain, protect, or repair any levee shall have the right to purchase for the use of the levee, whatever ground may be necessary to protect, maintain, or repair the levee (I.C. 13-2-19-1).
- (4) Conservancy Districts may be established for purposes which include undertaking actions for the prevention and control of flooding (I.C. 19-3-2-1), and Soil and Water Conservation Districts have been established in the state to promote the policy of conserving the state's soil and water resources and for the prevention of, among other things, damages due to flood water (I.C. 13-3-1-1).

**Non-Structural Measures (flood plain management)-Local**

- (1) Any person desiring to erect, make, use or maintain, suffer or permit, a structure, obstruction, deposit or excavation to be erected, made, used or maintained in or on any floodway must first seek and obtain authorization from the Natural Resources Commission prior to construction (I.C. 13-2-22-13).
- (2) The state has established minimum standards for the delineation and regulation of all flood hazard areas within the state and provided the means by which local units of government, based on minimum standards, can regulate the flood hazard areas within their jurisdiction (I.C. 13-2-22.5-1 et. seq.). Similarly, local units of government have been authorized to establish flood plain commissions which may regulate land uses within identified flood hazard areas (I.C. 18-7-4.5-1).

**General Measures - Local**

- (1) Cities and towns may petition in the circuit court of the county for specific or general relief for the purpose of lessening or preventing the inundation by flood water (I.C. 19-4-17-1).
- (2) No individual, partnership, association, corporation, municipal corporation, or political subdivision of the state may do any work designed to regulate or control state waters for flood control purposes without the approval of the Natural Resources Commission (I.C. 13-2-24-1 and I.C. 13-2-22-15).
- (3) Any municipality may borrow up to \$100,000 from the Flood Control Revolving Fund for flood control purposes, upon the approval of the Natural Resources Commission and the State Board of Finance (I.C. 13-2-23-3).

**Quality**

- (1) As a part of surface waters, flood water is subject to the water pollution laws of the state (I.C. 13-1-3; 13-1-4; 13-7-2-10).

**Research and Basic Data**

- (1) The Natural Resource Commission (NRC) is authorized to conduct investigations and measurements of water resources (I.C. 13-2-8-1).

- (2) The State Board of Health and the Department of Natural Resources are authorized to conduct applied research for the purpose of securing the scientific and technical data and information necessary for the solution of problems involving the wise beneficial development, use and management of the water resources of Indiana (I.C. 12-2-7).
- (3) The NRC is empowered to investigate, compile, and disseminate information and make recommendations concerning the state's natural resources and their conservation (I.C. 14-3-1-3).
- (4) The NRC shall cooperate with, advise, disseminate information to, assist any person or agency in this state in matters relating to flood control (I.C. 13-2-22-11).
- (1) The NRC is authorized to make a comprehensive study and investigation of all pertinent conditions of the areas in the state affected by floods and to adopt and establish a comprehensive plan for flood control (I.C. 13-2-22-11).

**Planning**

**Institutional Arrangements**

- (1) The accelerated soil survey program is administered through the State Soil and Water Conservation Committee, Department of Natural Resources, in cooperation with the U.S. Soil Conservation Service, Purdue Extension Service and the several counties and county soil and water conservation districts.
- (2) The general soil and water conservation program is administered by the State Soil and Water Conservation Committee, Department of Natural Resources, in cooperation with the 92 county soil and water conservation districts.