APPENDIX A

Riparian Protection Program Legislation, 1992

FILED

ARIZONA
SECRETARY OF STATE

State of Arizona Senate Fortieth Legislature Second Regular Session 1992

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CHAPTER 298

SENATE BILL 1030

AN ACT

AMENDING SECTION 45-101, ARIZONA REVISED STATUTES; MAKING - AN APPROPRIATION; RELATING TO THE RIPARIAN PROTECTION PROGRAM.

Be it enacted by the Legislature of the State of Arizona: Section 1. <u>Findings and policy</u>

A. The purpose of this act is to provide for collecting scientific and economic data and developing analyses and reports on which the legislature may base decisions concerning protecting riparian areas.

B. This state's riparian protection program should be based on sound scientific and economic evidence. To develop an effective, well-balanced riparian protection program, it is necessary to identify and classify the riparian areas in this state based on functions and values, to assess the impact of various activities on riparian areas and to assess alternative strategies in light of their environmental costs and benefits and their economic impacts on various classes of landowners and land users and on this state. This act provides for reports, studies and recommendations to the governor and the legislature on which a riparian protection program can be developed. It is also necessary to have accurate information to fully evaluate any potential impacts that a riparian protection program may have on existing water rights, pending water right adjudications and negotiated water settlements.

Sec. 2. Section 45-101, Arizona Revised Statutes, is amended to read:

45-101. <u>Definitions</u>

In this title, unless the context otherwise requires:

- 1. "Commission" means the Arizona water commission.
- 2. "Department" means the department of water resources.
- 3. "Director" means the director of water resources, who is also the director of the department.

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"Effluent" means water that has been collected in a sanitary sewer for subsequent treatment in a facility that is regulated pursuant to sections 49-361 and 49-362. Such water remains effluent until it acquires the characteristics of groundwater or surface water.

"Groundwater" means water under the surface of the earth regardless of the geologic structure in which it is standing or moving. Groundwater does not include water flowing in underground streams with

ascertainable beds and banks.

6. "Interstate stream" means any stream constituting or flowing along the exterior boundaries of this state, and any tributary originating in another state or foreign country and flowing into or through this state.

- "RIPARIAN AREA" MEANS A GEOGRAPHICALLY DELINEATED AREA WITH DISTINCT RESOURCE VALUES, THAT IS CHARACTERIZED BY DEEP-ROOTED PLANT SPECIES THAT DEPEND ON HAVING ROOTS IN THE WATER TABLE OR ITS CAPILLARY ZONE AND THAT OCCURS WITHIN OR ADJACENT TO A NATURAL PERENNIAL OR INTERMITTENT STREAM CHANNEL OR WITHIN OR ADJACENT TO A LAKE, POND OR MARSH BED MAINTAINED PRIMARILY BY NATURAL WATER SOURCES. RIPARIAN AREA DOES NOT INCLUDE AREAS IN OR ADJACENT TO EPHEMERAL STREAM CHANNELS, ARTIFICIALLY CREATED STOCKPONDS, MAN-MADE STORAGE RESERVOIRS CONSTRUCTED PRIMARILY FOR CONSERVATION OR REGULATORY STORAGE, MUNICIPAL AND INDUSTRIAL PONDS OR WATER TRANSPORTATION, DISTRIBUTION, OFF-STREAM STORAGE AND MAN-MADE COLLECTION SYSTEMS.
- "Sanitary sewer" means a pipe or other enclosed conduit that 7. 8. carries, among other substances, any water-carried wastes from the human body from residences, commercial buildings, industrial plants or institutions.
- "Surface water" means the waters of all sources, flowing in 8. 9. streams, canyons, ravines or other natural channels, or in definite underground channels, whether perennial or intermittent, flood, waste FLOODWATER, WASTEWATER or surplus water, and of lakes, ponds and springs on the surface. For the purposes of administering this title, surface water is deemed to include central Arizona project water.

Sec. 3. Evaluation of hydrologic effect of groundwater pumping and surface water appropriations on riparian areas

Consistent with the definitions prescribed by section 45-101, Arizona Revised Statutes, the director of water resources shall conduct studies pursuant to subsection B of this section to evaluate the effect of groundwater pumping and surface water appropriations on riparian areas, subject to the availability of appropriated monies for that purpose.

B. The studies shall include evaluations of:

The hydrologic effect of groundwater pumping on riparian areas.

The effect on riparian areas of new surface water appropriations and changes in the use or point of diversion of existing surface water appropriations.

3. Alternative regulatory programs designed to balance the protection of riparian areas with existing and future groundwater pumping

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and new surface water appropriations and changes in the use or point of diversion of existing surface water appropriations. In evaluating the alternative regulatory programs, the director shall consider:

economic impacts on various classes of landowners,

including federal, state, private and Indian landowners.

(b) The impacts on existing water rights, pending water right adjudications and negotiated water settlements.

(c) The availability of alternative water supplies for existing and future users.

(d) The environmental costs and benefits of the program.

(e) The costs to the department of water resources of implementing the program.

C. If such monies are appropriated for fiscal year 1992-1993, the director shall complete the studies and proposed regulatory program and report the results of the study on or before December 1, 1993 to the governor, the speaker of the house of representatives, the president of the senate and the riparian area advisory committee established under section 7 of this act. The director shall provide an opportunity for public comment on each proposed regulatory program and any recommendations to be submitted pursuant to this subsection.

Sec. 4. Appropriation

- A. The sum of two hundred fifty thousand dollars is appropriated from the state general fund in fiscal year 1992-1993 to the department of water resources to pay the costs of the study described in section 3 of
- B. The appropriation made by this section is exempt from lapsing section 35-190, Arizona Revised Statutes, except that monies remaining unexpended or unencumbered on June 30, 1994 revert to the state

Sec. 5. Duties of Arizona game and fish department

A. The Arizona game and fish department shall develop a system for classifying riparian areas in this state, including:

- 1. Physical and ecological criteria to be used to develop riparian designations consistent with the definition prescribed by section 45-101, Arizona Revised Statutes.
- 2. A hierarchical designation system according to functions and values. relative
- B. After the riparian area classification system is developed under subsection A of this section, the department shall identify, classify and map riparian areas in this state with the cooperation of the department of environmental quality, the department of water resources and other appropriate agencies, instrumentalities and political subdivisions of this The department shall also consult with appropriate federal agencies. The department shall give priority to identifying, classifying and mapping riparian areas that are associated with perennial waters. In addition, the department shall identify:
- 1. The land ownership of identified riparian areas as Indian, federal, state or private and the current land uses of those areas.

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2. Existing options for protecting riparian areas in each ownership category that may be available under existing state and federal laws.

C. Not later than December 1, 1993 the department shall submit a report of its findings under subsection B of this section to the governor, the president of the senate, the speaker of the house of representatives

and the riparian area advisory committee.

D. Within six' months after mapping and classifying riparian areas in any county or a logical portion of a county, the department shall publish a notice that the maps and classifications are available. The notice shall be published once each week for three consecutive weeks in two newspapers of general circulation in the county in which the riparian area is located. In addition, the department shall establish and maintain a mailing list of names and addresses of persons who request notice under this subsection by mail. The mapping and classification:

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1. Is for informational purposes only.

2. Shall not require any land owner to contest or accede to the mapping or classification.

3. Does not preclude any land owner from subsequently contesting the mapping or classification.

Sec. 6. Duties of department of environmental quality

A. Consistent with the definitions prescribed by section 45-101, Arizona Revised Statutes, the department of environmental quality shall identify activities, operations and uses that occur on land in riparian areas of federal, state and private property in this state that involve or depositing material, removing vegetation or otherwise obstructing, altering or destroying riparian areas. The department shall evaluate at least the following activities:

1. Timber harvesting.

2. Agricultural land clearing.

3. Recreational use and development.

4. Commercial, industrial and residential development.

5. Road and bridge construction.

6. Dam and reservoir construction and operation.

7. Channelization and bank stabilization.

8. Sand and gravel extraction.

9. Wetland drainage.

10. Grazing.

Landfills and sewage treatment facilities. 11.

12. Mining and metallurgical operations.

department shall complete the tasks prescribed under subsection A and submit a report evaluating the identified activities to the governor, the president of the senate, the speaker of the house of representatives and the riparian area advisory committee not later than October 1, 1993.

Sec. 7. Riparian area advisory committee

A. The riparian area advisory committee is established consisting of the following members:

1. The director, or the director's designee, of:

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                    The Arizona department of agriculture.
               (a)
    2
                   The department of environmental quality.
               (b)
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                   The department of transportation.
               (c)
                   The department of water resources.
               (d)
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               (e)
                   The game and fish department.
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              (f)
                   The state land department.
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              (g) The state parks board.
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              2. The following members appointed by the governor:
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              (a) Two members representing counties in this
        populations of less than five hundred thousand persons according to the
  10
        most recent United States decennial census.
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              (b) One member representing counties in
                                                            this
        populations of five hundred thousand or more persons according to the most
  13
                                                                           having
        recent United States decennial census.
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              (c) One member representing a municipality that owns and operates a
       wastewater treatment plant that is regulated pursuant to sections 49-361
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       and 49-362, Arizona Revised Statutes, and that is located in an active
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       management area with a population exceeding one million five hundred
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       thousand persons according to the most recent data compiled by the
       department of water resources.
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             (d) One member representing an Indian tribe in this state.
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             (e) The president of the Arizona association of conservation
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       districts, or the president's designee.
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                 One member representing the timber industry.
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                 One member representing the real estate development industry.
             (g)
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                 One member actively engaged in livestock ranching as the major
             (h)
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      source of income.
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            (i) One member actively engaged in farming as the major source of
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      income.
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            (j) One member representing sand and gravel operations.
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            (k) One member representing the metal mining industry.
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                One representative of an agricultural improvement district.
            (1)
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            (m) One riparian researcher from a state university.
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                One representative of the Arizona riparian council.
            (n)
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            (o) One representative of an environmental organization who resides
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     in Apache, Navajo, Coconino, Yavapai or Greenlee county.
           (p) One representative of an environmental organization who resides
     in Gila, Maricopa, Mohave, LaPaz or Yuma county.
           (q) One representative of an environmental organization who resides
     in Pinal, Graham, Cochise, Pima or Santa Cruz county.
           (r) One representative of a recreational users organization.
              In order to coordinate with existing federal programs that
     impact riparian areas, the chief federal administrative officer in this
     state of the following federal agencies, or that officer's designee, or,
     if there is no chief federal administrative officer for this state,
    administrative officer in this state designated by the head of the
    appropriate federal administrative region in which this state is located
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shall serve as ex officio members:

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The army corps of engineers. (a) The bureau of land management. (b)

The bureau of reclamation. (c)

The environmental protection agency. (d)

The fish and wildlife service. (e)

(f) The forest service.

The national park service. (g)

(h) The soil conservation service.

The director of environmental quality shall chair the committee and the department of environmental quality shall provide staff support and meeting space for the committee. Members of the committee are not eligible for compensation or reimbursement of expenses.

C. Ex officio members of the committee representing agencies are not eligible to vote and are not members for purposes of determining the presence of a quorum, but the committee shall cooperate with and seek advice from the ex officio members in order to consider the relationship between existing and recommended future state and federal programs that impact riparian areas. The committee shall meet at least quarterly and may meet more often as called by the chairman or as requested by at least six of the members eligible to vote. November 1, 1993 the committee shall meet at least monthly to review and evaluate the information presented in the agencies' reports and may meet more often as called by the chairman or as requested by at least six of the members eligible to vote.

D. The committee shall:

1. Study the components of a riparian area protection program, including the provisions and activities conducted under this act, in comparison with other state and federal programs, statements, regulatory methodologies, evaluation criteria, coordination including with existing state and federal programs and guidelines, mitigation, funding mechanisms, public notification, education and involvement, enforcement and other elements that are essential to a successful riparian area protection program.

2. Assess alternative regulatory and nonregulatory strategies to protect riparian areas with an analysis of the fiscal, economic and environmental impacts associated with each alternative and consider whether the alternatives should vary based on different classes of landowners to address impacts on private property rights and the potential

for multiple land use planning.

3. Evaluate the reports submitted pursuant to sections 3, 5 and 6 of this act.

4. Submit an interim report of the committee's findings under paragraphs 1 and 2 of this subsection to the governor, the president of the senate and the speaker of the house of representatives not later than

Based—on the findings of the interim report identification, classification and mapping of riparian areas in this

state, prepare recommendations for proposed statutory provisions for a riparian area protection program in this state.

6. Submit a final report and recommendations with respect to the scope and parameters of any necessary regulatory program and additional statutory provisions that may be necessary to implement the recommendations to the governor, the president of the senate and the speaker of the house of representatives not later than December 1, 1994.

Sec. 8. Repeal

Section 7 of this act is repealed from and after December 31, 1994.

APPROVED BY THE GOVERNOR JULY 10, 1992.

FILED IN THE OFFICE OF THE SECRETARY OF STATE JULY 10, 1992.

APPENDIX B

Riparian Resource Management on Indian Lands in Arizona

DRAFT REPORT

RIPARIAN RESOURCE MANAGEMENT ON INDIAN LANDS IN ARIZONA (An Inter-Tribal Position Paper)

Presented To

THE ARIZONA RIPARIAN AREA ADVISORY COMMITTEE

May 19, 1994

DRAFT

RIPARIAN RESOURCE MANAGEMENT ON INDIAN LANDS IN ARIZONA An Inter-Tribal Position Paper

The following Arizona Indian Tribes do hereby present this position paper regarding the management of riparian resources on Tribal lands, to the Riparian Area Advisory Committee, Governor and Legislature of the State of Arizona.

(Tribes who so desire will be listed here)

Introduction

It remains the right of each independent and sovereign Tribal government to determine the manner in which it will manage its resources, including the protection and use of its riparian areas. It remains as well, the sovereign right of each Tribe to determine the extent to which it may wish to coordinate its efforts with the State of Arizona or other jurisdictions, in the management of riparian resources.

In this regard, the assignment of one individual to the Arizona Riparian Area Advisory Committee to represent the concerns and desires of all twenty-one separate and sovereign Tribal governments, relative to the management of their riparian resources statewide, is an impossible task and reminiscent of the historic indifference of this Nation to the vast diversity and sovereignty of its indigenous peoples.

This paper offers insight into the manner by which the State of Arizona might enter into a new framework of mutual respect and cooperation with Arizona Indian Tribes, on a government-to-government basis, in the shared management and protection of precious riparian areas, which know no man-made jurisdictional boundaries.

Riparian Resource Management on Tribal Lands in Arizona

Living in harmony with and protecting the land, air, and water resources, as well as all creatures living upon the Earth is inherent to the Native American culture. Indigenous peoples in Arizona, as in the rest of the Nation, were the first natural resource managers, living in harmony with the land for many generations.

It has only been in recent history, with the attempts of humankind to control our Earth, to use her resources to a greater extent than which she could replentish herself, that we have run into the danger of destroying the great and bounteous life's source from which we all originate.

Over the past two and one-half decades, our great Nation has come to realize the dangers inherent in the destruction of the Earth. Various attempts have been made to bring new understanding to management of our precious natural resources. Laws have been passed, regulatory agencies have been created, educational efforts have been launched, and slowly, some progress is being made in those areas where the will of the people and their government has come together to protect the environment.

Recent environmental protection efforts have been slow to happen on Tribal lands. Our people have long borne the brunt of environmental pollution and resource overutilization for the whole of society, while we have received relatively little of the financial support which was provided to states and other governments to build environmental management programs. Currently, Arizona's twenty-one Indian Tribes are in varying stages of developing environmental protection programs to manage our resources. While some Tribes have very sophisticated environmental resource management programs, the majority of us are only beginning to assess our many needs, priorities and options.

It remains then, the fact that there are twenty-one separate and sovereign Tribal governments which exist and which have management jurisdiction over the land, water, plant and animal resources within their boundaries. It also remains a fact that riparian areas know not the jurisdictional boundaries of man, such that their protection is dependent upon the coordination of all affected and potentially affecting jurisdictions.

Interjurisdictional Management of Riparian Resource Areas

Arizona Tribal governments feel that excellent opportunities exist for local inter-jurisdictional cooperation and coordination of riparian resource management. Operating within the premise that riparian areas fall within a larger watershed area, individual Tribal governments will be important players in local riparian resource protection planning and management efforts.

In addition to the many opportunities which exist for development of common resource management goals and actions locally, additional opportunities exist statewide, in such areas as riparian resource research, data sharing and resource pooling efforts.

Summary Statement

Arizona Tribal governments, having long invested in the wise use and protection of the Earth, and having much knowledge to offer, desire to pursue the coordinated management of riparian resources with other jurisdictions in the State. Just as others will benefit from the Tribal perspective and involvement, the health of our riparian resources will benefit greatly from the investment of technical and financial assistance to assist Tribal governments to develop state-of-the-art resource management capabilities.

Given the significant amount of riparian resources, watersheds and headwaters existing on Tribal lands in Arizona, the State of Arizona stands to benefit greatly from acknowledging each of the twenty-one sovereign Tribal governments, and working with us as equal partners in the protection of the precious riparian resources which we and our future generations must share.



APPENDIX C

Issue Areas Paper Presented to the RAAC May 1993

RIPARIAN PROTECTION

ISSUE AREAS

These "issue areas" are focused upon causes of damage to riparian areas. Existing programs in Arizona and in other states can be better understood by seeing how they deal with these issues. Which issue(s) did each program address? How effectively has it dealt with the issues? At what cost?

Some of these issues may not be much of a problem in Arizona, and some may be adequately addressed by existing programs. The issues can be addressed through regulatory or non-regulatory methods. The cost of dealing with some issues may be greater than the benefits. Ultimately the RAAC must give the legislature its opinion on which issues really need additional action, and what kind of action would work best.

I. Water Availability

- A. Groundwater pumping depletes surface water flows, or lowers water table below root zone (Sample solutions: limit pumping amount; limit withdrawals from certain areas, aquifers; incentives to switch to other water sources or deeper aquifers; require groundwater replenishment; education; water conservation to reduce demand; mitigation in another area; etc.)
- B. New surface water diversions or changes in current diversion points reduce stream flows (Sample solutions: purchase and retire water rights; instream flow rights; better court protection of existing downstream rights; limit new diversion; permitting for changing point of diversion; water conservation to reduce demands; incentives to use other sources; mitigation in other areas; etc.)
- C. Reservoir release patterns affect seasonal availability, disrupt flood cycles (Sample solutions: mitigation; incentives to change release patterns; negotiated permits and operating criteria; etc.)

II. Large-Scale Destruction or Alteration of River Channels

- A. Sand and gravel mining; placer mining (Sample solutions: best management practices(BMPs); exclusion from some areas; reclamation requirements; mitigation measures; impact assessments; etc.)
- B. Dredging and filling (Sample solutions: BMPs; exclusion from some areas; reclamation requirements; mitigation measures; impact assessments; etc.)

- C. Landfills (Sample solutions: BMPs; exclusion from some areas; reclamation requirements; mitigation measures; impact assessments; etc.)
- D. Road construction (Sample solutions: BMPs; exclusion from some areas; reclamation requirements; mitigation measures; impact assessments; etc.)
- E. Channelization and bank stabilization (Sample solutions: improved benefit/cost studies; impact assessments; floodplain management and zoning; compensation/incentive programs for adjacent landowners; exclusion from certain areas; etc.)
- F. Inundation caused by new reservoir construction (Sample solutions: Improved benefit/cost studies; impact assessments; mitigation; exclusion from certain areas; water supply or flood protection alternative; etc.)

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III. Adjacent Land Uses: (Erosion, Sedimentation, Vegetation Change, Water Quality Impacts)

- A. Grazing (Sample solutions: permitting with BMPs on public land; BMPs on private land; fencing; incentive programs for riparian improvement; incentives to develop alternative water sources; exclusion from some public lands; etc.)
- B. Timber harvesting (Sample solutions: BMPs; require buffer strips; exclusion from special areas; incentives for buffer strips; etc.)
- C. Agriculture (Sample solutions: BMPs; require buffer strips; exclusion from special areas; incentives for buffer strips; etc.)
- D. Mining (Sample solutions: impact assessments; BMPs; reclamation requirements; require bonds posted to ensure cleanups and compliance; large buffer areas; etc.)
- E. Road construction (Sample solutions: impact assessment; benefit cost assessment; alternative route selections; BMPs; reclamation requirements; buffer zones; etc.)
- F. Commercial/residential/industrial development (Sample solutions: zoning; construction setbacks; buffer strips; BMPs; incentives for conservation easements; government purchase of special areas; etc.)
- G. Degradation form recreational uses (Sample solutions: quota; reservations for certain areas; improved trails, facilities; closing some access points; limitation of off-road vehicle use; education; etc.)

IV. "Point Source" Water Quality Problems

- A. Effluent from sewage treatment plants (Sample solutions: NPDES permits; improved monitoring and enforcement; improved secondary or tertiary treatment; government grant/loans for treatment plant upgrades; special standards for "effluent-dominated waters"; pre-treatment programs; effluent reuse or recharge; etc.)
- B. Pollution from industrial and other point sources (Sample solutions similar to IV. A.)

V. Exotic (non-native) Species

(Sample solutions: eradication programs; stocking, planting programs; prescribed burning; etc.)



APPENDIX D

Bureau of Land Management's Riparian Policy

Bureau of Land Management Riparian Area Management Policy

BACKGROUND

Riparian areas are unique and among the most productive and important ecosystems, comprising approximately 1 percent of the public lands. Characteristically, riparian areas display a greater diversity of plant, fish, wildlife, and other animal species and vegetation structure than adjoining ecosystems. Healthy riparian systems filter and purify water as it moves through the riparian zone, reduce sediment loads and enhance soil stability, provide micro-climate moderation when contrasted to extremes in adjacent areas, and contribute to groundwater recharge and base flow.

DEFINITIONS

Riparian Area - an area of land directly influenced by permanent water. It has visible vegetation or physical characteristics reflective of permanent water influence. Lake shores and stream banks are typical riparian areas. Excluded are such sites as ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil.

Riparian Area-Dependent Resources - resources such as water, vegetation, fish, and certain wildlife that owe their existence to the riparian area.

OBJECTIVE

The objective of riparian area management is to maintain, restore, or improve riparian values to achieve a healthy and productive ecological condition for maximum long-term benefits.

POLICY STATEMENTS

In order to meet the foregoing objective, the Bureau will to the extent practical:

- o Achieve riparian area improvement and maintenance objectives through the management of existing uses wherever feasible.
- o Ensure that <u>new</u> resource management plans and activity plans, and existing plans when revised, recognize the importance of riparian values, and initiate management to maintain, restore, or improve them.
- o Prescribe management for riparian values that is based upon site-specific characteristics and settings.
- o Give special attention to monitoring and evaluating management activities in riparian areas and revise management practices where site-specific objectives are not being met.
- o Cooperate with and encourage the involvement of interested Federal, State, and local governments and private parties to share information, implement management, coordinate activities, and provide education on the value, productivity, and management of riparian areas.
- o Retain riparian areas in public ownership unless disposal would be in the public interest, as determined in the land use planning system.
- o Identify, encourage, and support research and studies needed to ensure that riparian area management objectives can be properly defined and met.

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Director,	Bureau	of	Land	Manager	ent

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Date



APPENDIX E

Glossary

APPENDIX C GLOSSARY OF TERMS

NOTE: This glossary explains and defines terms and programs identified in Chapter IV on Alternatives for Riparian Area Protection Possible Applicable to Arizona. Some terms and programs are part of new measures and not incorporated in statute or rule and therefore are provided as guidance only.

General Terms

Implementation Method.

Economic Impact. The effect of an action or policy, on the management of the income

and expenditures of a household, business, community, or

government.

Effluent means wastewater that has been treated and achieved

compliance with an applicable standard.

Environmental Impact. The effect of an action or policy on the quality of natural or

human-influenced [built] surroundings.

Fiscal Impact. The effect of an action or policy on government expenditures and

revenues and on taxes.

Goal. A concise statement of a community or organization's central

aspirations, used to focus and direct processes or programs.

Specific actions taken to put into practice various strategies for riparian protection. Implementation methods can take many forms such as policies, strategies (both nonregulatory and regulatory),

programs, and executive orders.

Mitigation. Measures taken to lessen the negative impacts of an action or a

project on a riparian area.

Nonregulatory Strategy. An activity encouraged or sanctioned by the state. In this context,

such an activity would not involve regulation by state government but may enable regulation by local government or private entities.

Objective. A clear and specific statement of planned results to be achieved

within a stated time period.

Protection Program. A comprehensive set of activities undertaken to define, regulate, and

enforce the protection of riparian areas at the state level. The protection program would include various implementation strategies (both nonregulatory and regulatory) that would be put into action to meet specified goals by a coalition of federal and state agencies, and

local governments and private groups.

Regulatory Strategy. A rule or order prescribed by state government to control or direct

selected activities. A regulation requires adjustment of activities to

some standard or requirement.

Strategies. Generally recognized mechanisms for protecting riparian resources

that could be used as elements in a comprehensive protection policy.

Strategies can be either regulatory or non-regulatory.

Nonregulatory Strategies

Capital Improvement

Programming.

The multi-year scheduling of public physical improvements. The scheduling is based on studies of fiscal resources available and the choice of specific improvements to be constructed for a period of 5 or 6 years in the future. The state could require that the impact of capital improvements on riparian areas be assessed in such programming.

Conservation Easement Acquisition.

Conservation Easement

Estate Tax Incentives.

Donation.

Deed Restriction.

Fee-Simple Acquisition

General Plan Enabling Authorization.

Greenway/River Corridor Planning.

Income Tax Incentives.

Intergovernmental Agreements.

Leases.

Limited Development Strategies.

Local Area Management.

Management Agreements.

Mutual Covenants.

Non-financial Incentives.

Property Tax Incentives (also called Preferential Tax Policies).
Research.

The purchase of partial rights in a piece of land in perpetuity or for a set period of time. The Heritage Fund is a potential source for purchasing easements on riparian areas. (Also called purchase of development rights in some states.)

The donation of partial rights in a piece of land in perpetuity or for a set period of time.

Voluntary limitations placed in the property deed restricting certain uses.

State inheritance tax responsibilities are reduced in exchange for the donation of a conservation easement and/or a voluntary deed restriction.

The state purchases all the legal rights associated with a (land and water rights acquisition). given parcel of land to protect riparian areas, including water rights.

General plan enabling statutes are amended by the state to encourage local governments to include riparian area protection strategies in conservation elements.

The identification of the most important features along a river or stream corridor, including riparian areas; the description of ways these features can be protected; and the assignment of responsibilities for protection.

State income tax responsibilities are reduced in exchange for the donation of a conservation easement, a voluntary deed restriction, and/or a management agreement with a state agency. Cooperative understandings, sanctioned and/or encouraged by the state, among various governmental jurisdictions, that is, federal, tribal, state, and local agencies.

Agreements for the rental of riparian areas by a landowner to a state agency or a conservation organization for a specified period of time.

Involves the sensitive development of the least environmentally significant portions of the property in order to finance conservation of the remaining property to meet landowner economic needs and goals.

The state enables a local (or regional) authority to oversee the distribution of water.

An agreement between the landowner and a state agency or a conservation organization whereby either the landowner or agency/organization agrees to manage her/his property in a certain manner consistent with riparian area protectional goals.

Voluntary agreements between nearby or adjacent landowners to control the future use of their land through restrictions agreed upon by all participating landowners.

Measures designed to recognize individuals, companies, or government agencies that have voluntarily protected riparian areas, such as conservation awards programs.

Favorable taxation of land in exchange for an agreement to protect riparian areas on that land for a specified period of time.

Funding for state agencies, individuals, university departments, or private organizations to study riparian areas.

Restoration, Creation, and Management.

Special Area Designation.

Subsidies.

Technical Assistance, Education, and Outreach.

Transfer of Development Rights (TDR).

Regulatory Strategies
Best Management
Practices (BMPs).

Endangered Species Protection.

Executive Order (EOs).

Floodplain Management.

General Plan Requirements.

In-stream Flow Programs.

Nonpoint Source Pollution Control.

Projects undertaken by state agencies—often in cooperation with local, tribal, and/or federal governments as well as non-profit organizations and/or private individuals—to improve and enhance the state's riparian areas.

River corridors or riparian areas are recognized by a state agency for its unique attributes.

Compensation is provided to landowners for a permanent easement on riparian areas and/or the costs to maintain or improve riparian areas are shared by the state.

The provision of data, maps, and other informational materials, as well as knowledge and advice regarding options for protecting and managing riparian areas and for complying with state and federal regulations to local governments, non-profit organizations, and landowners. State agencies can provide technical assistance through guidebooks, workshops, personal communication, and seminars. The state can also assist with the development of environmental education curricula to include information about riparian areas for schools. Pamphlets and other reading materials, television programs, radio announcements, videos, traveling exhibits, lectures, guided tours, field trips, and annual events, such as Verde River Days, can also be organized or produced.

The development rights are purchased to be used in another location, thereby separating the development rights from the land itself.

Measures required for landowners to achieve specified levels of water quality or of riparian area functions. (In some circumstances, BMPs may also be nonregulatory.)

The prohibition of taking or harming an endangered or threatened plant or animal species or sustaining habitat in a riparian area.

A statement by the governor directing state agencies to protect riparian areas using their existing authorities. (In some circumstances, EOs may also be nonregulatory.)

Local governments are authorized and required by the state to adopt local floodplain regulations to control activities in the 100-year floodplain to reduce flood loss. Most riparian areas lie within 100-year floodplains.

General plan enabling statutes are amended by the state to require local governments to include riparian area protection strategies in conservation/environmental protection elements.

At the present time an Instream Flow Right is an in-situ appropriation and means an appropriation of public water for recreation use or wildlife, including fish use or for both in which the water is put to benefical use without being diverted from its natural bed or channel.

State and Federal programs for water pollution control based on state water quality standards. States can protect riparian areas through these programs through the development of Best Management Practices (BMPs) for various land use activities. States may also protect or restore riparian areas as part of landscape-based approaches, such as watershed planning, to control nonpoint source pollution.

Ordinance.

Performance Standards.

Permits.

Plan Approval.

Point Source Pollution Control. Riparian Areas Regulatory Program. Shoreline Protection.

Special Area Plans (often referred to as "areas of critical concern," "areas of state interest," or "areas of critical environmental concern"). Special Purpose Plans.

State Assumption of Section 404.

State Dredge and Fill Permits.
State Environmental Policy Act.

Statutory Non-Permit System.

Statutory Permit System.

Streambed Alteration Permits.

The state requires local governments to adopt ordinances, such as zoning, to protect riparian areas in the development process. Standards for such ordinances are set by the state, but local governments design the specific components for their setting. Criteria that are established and must be met before a certain use will be permitted or during the operation of an activity. These criteria, or standards, may be a set of economic, environmental, or social factors or any combination of these factors. For example, certain levels of riparian area functions may be part of a performance standard.

A permit is required from a state agency for an activity (land and water) to occur within riparian area and/or for impacts to hydrology. A regulatory agency reviews plans for disturbance/alteration and approve/disapprove those plans. Such plans should indicate how a project will be constructed and operated.

The regulation of point sources of pollution through permits.

The state defines riparian areas and the activities subject to regulation.

Activities in and around river and stream shorelines are regulated, typically through a permit process. State shoreline regulatory programs often rely heavily on local involvement; i.e., the state sets standards which must be adopted and implemented by local governments.

Plans are developed for geographical rather than jurisdictional areas because of their statewide importance. Special area plans are designed to provide policies and guidelines for interjurisdictional protection and management.

Statewide plans are developed for a special purpose, such as enhancing recreational opportunities or water quality. Special purpose plans can specially address riparian areas protection or can encompass riparian protection as a policy or an objective that is part of a broader single purpose, such as highway improvement. States can assume the administration of the federal program regulating the discharge of dredged or fill material into waterways. Such dredge and fill activities frequently impact riparian areas. States can regulate through permits the discharge of dredged and fill material into waterways.

The state can adopt an environmental policy act, requiring state and local agencies to prepare an assessment of the impacts of activities and policies on the environment, including riparian areas. Guidelines are set by the state to which all water users have to adhere. For example, all persons making new diversions or groundwater withdrawals might be required to maintain groundwater tables at levels which do not cause diminishment of riparian vegetation.

The state is required by statute to use a permit before water can be used or diverted. The conditions of a permit can be enforced by an agency through administrative action which might include cease and desist orders, fines, or revocation of permits.

Permits are required from the state before a streambed or streamside can be altered. The issuance of such a permit can be conditioned on riparian area protection or mitigation. Watercourse Permits.

Wild and Scenic Rivers Protection.

The state can require a permit before a watercourse is altered. The issuance of such a permit can be conditioned on riparian area protection or mitigation.

The state can preserve rivers and streams in their free-flowing condition, protect waterways and adjacent riparian areas from future development, and preserve ecological, aesthetic, and recreational values. The state can enable local governments to implement special area management plans to protect wild and scenic rivers.