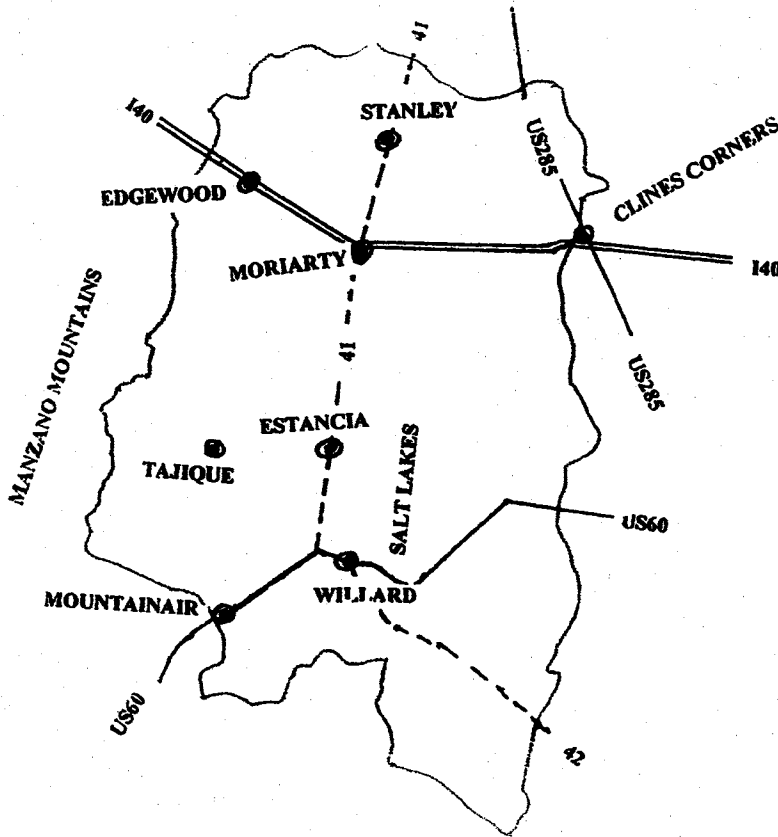


ESTANCIA BASIN
RECOMMENDED REGIONAL
WATER PLAN
(YEAR 2000 TO YEAR 2040)

APPENDICES

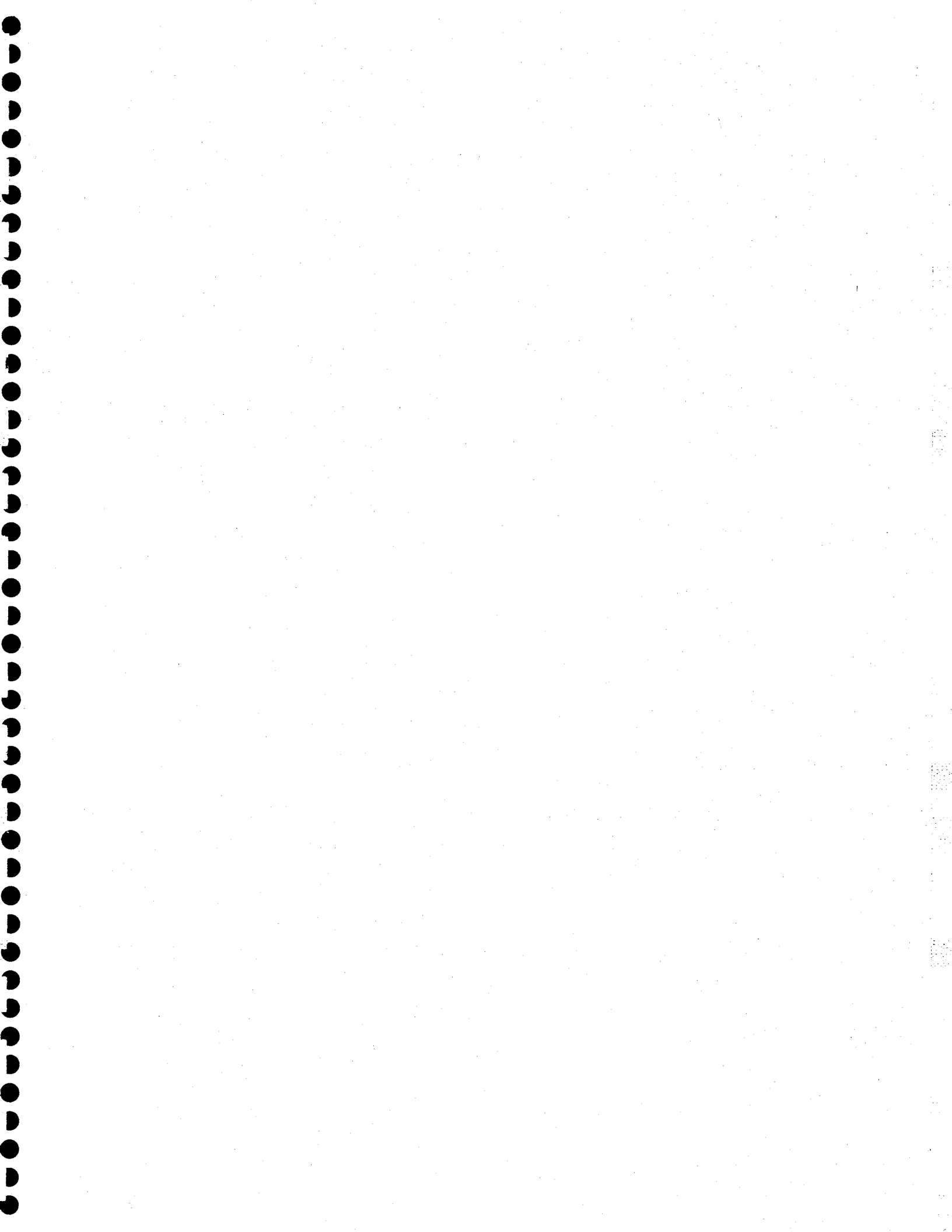


Estancia Basin Water

Planning Committee

January 8, 1999

Prepared by:
Corbin Consulting, Inc.
Santa Fe, New Mexico



APPENDIX A

Tri-County Memorandum of Understanding

MEMORANDUM OF UNDERSTANDING
FOR
COORDINATED WATER RESOURCE PLANNING
IN THE
ESTANCIA BASIN

This Memorandum of Understanding is an agreement by the Counties of BERNALILLO, SANTA FE, and TORRANCE which provides for the establishment of an organization and process to help coordinate water resource planning in the Estancia Basin. The boundaries of this Basin are generally described as shown on the Estancia Basin map which is attached and made a part of this Memorandum.

WHEREAS, the Estancia Basin is a hydrologically closed drainage basin located predominantly within TORRANCE County and significantly within BERNALILLO and SANTA FE Counties; and

WHEREAS, the ground-water resources of the Estancia Basin are vulnerable to rapid depletion by wells, saline water intrusion of fresh water aquifers, and contamination of recharge waters; and

WHEREAS, there are numerous water user constituencies who are dependent on the renewable, sustainable, and fresh water resources of the Estancia Basin; and

WHEREAS, a basin water planning committee has been established recently by the TORRANCE County Commission and has included participants invited from the BERNALILLO and SANTA FE County areas; and

WHEREAS, regional water planning is being promoted and supported by the New Mexico Interstate Stream Commission, and initial water planning research for the Estancia Basin has been included as part of the regional water planning process of the Middle Rio Grande Council of Governments; and

WHEREAS, the implementation of water resource planning and management shall respect local government sovereignty within the Estancia Basin, and implementation that involves funding must be approved by the affected jurisdiction.

NOW, THEREFORE, IT IS AGREED AS FOLLOWS:

SECTION 1. PURPOSE AND OBJECTIVES.

This Memorandum of Understanding is intended to provide for the coordination of water planning activities affecting the Estancia Basin. Such coordination can be accomplished through the efforts of a special-purpose, advisory planning committee representing the water users and governmental jurisdictions of the Estancia Basin.

The general goal for this water planning process is to protect the quality and preserve the quantity of water resources of the Estancia Basin for future generations. Various objectives for achieving this goal include but are not limited to the following:

- A. Develop a geohydrologic model of the Basin in order to characterize ground-water flow and to calculate the basin ground-water supply;
- B. Maintain a categorical inventory of water users in the Basin and continuously forecast the consumptive demands on Basin ground water;
- C. Establish a ground-water monitoring system for collecting data on water table changes, saline water intrusion, and contamination in Basin recharge areas;
- D. Recommend various techniques of land use management for reducing threats to water resources, especially in vulnerable areas;
- E. Initiate and conduct a water resource information and education program designed to increase public knowledge of water laws and regulations, water conservation techniques, and the need to develop contamination prevention policies;
- F. Formulate water resource and conservation management policies for consideration by the various governments with jurisdiction in the Estancia Basin;
- G. Prepare a compilation of forty-year water development plans from all municipalities, counties, and public utilities operating water supply systems within the Estancia Basin; and
- H. Secure the future availability of usable water resources to maintain and sustain existing customary and cultural uses.

SECTION 2. ORGANIZATION.

The Torrance County/Estancia Basin water planning committee initially created by the TORRANCE County Commission, shall be known as the Estancia Basin Water Planning Committee, and shall provide a core group to be expanded with members appointed in accordance with this Memorandum.

Membership on the Estancia Basin Water Planning Committee shall be established by mutual agreement of the County Commissions of BERNALILLO, SANTA FE, and TORRANCE Counties. The Estancia Basin Water Planning Committee shall include thirteen voting members with the addition of various non-voting members. Each member shall represent a specific category of interest and shall be appointed according to the following requirements:

- A. Three County government representatives
 1. Each County appoints one member
 2. Each member serves a renewable term of three years

- B. Three representatives from the municipal/developer/utility interest group
 - 1. Each County appoints one member
 - 2. Each member serves a renewable term of three years
- C. Three representatives for agricultural enterprise
 - 1. One representative appointed by SANTA FE County
 - 2. Two representatives appointed by TORRANCE County
 - 3. Each member serves a renewable term of three years
- D. Three representatives appointed by the Soil and Water Conservation Districts (SWCD)
 - 1. One representative from Edgewood SWCD
 - 2. One representative from East Torrance SWCD
 - 3. One representative from Claunch-Pinto SWCD
 - 4. Each member serves a renewable term of three years
- E. One citizen-at-large representative
 - 1. Nominated and appointed by the Estancia Basin Water Planning Committee
 - 2. Member serves a renewable term of one year
- F. Various non-voting representatives appointed by State and Federal agencies including but not limited to:
 - 1. N.M. State Engineer Office (required)
 - 2. N.M. State Land Office (optional)
 - 3. NMSU Cooperative Extension Service (optional)
 - 4. Natural Resource Conservation Service (optional)
 - 5. U.S. Forest Service (optional)

SECTION 3. COMMITTEE RESPONSIBILITIES.

The Estancia Basin Water Planning Committee shall perform an advisory role to various governments on matters concerning the water resources of the Estancia Basin. The members of the Estancia Basin Water Planning Committee shall continually develop their knowledge and expertise, as a group, about the water resources of the Estancia Basin.

The major responsibilities of the Estancia Basin Water Planning Committee shall be described as follows:

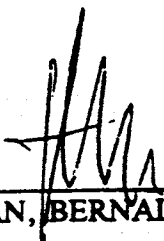
- A. Promote and participate in water resource planning activities affecting the Estancia Basin;
- B. Establish its own rules of conduct for purposes of holding public meetings and maintaining an active membership;
- C. Collect and compile all available data and information on the water resources of the Estancia Basin. Such data and information will be placed in a water resources library at the TORRANCE County Courthouse;
- D. Maintain communications with the respective Planning Commissions of the Counties of BERNALILLO, SANTA FE, and TORRANCE;
- E. Review and comment on major development proposals impacting water resources as appropriate and by request from any government agency with jurisdiction in the Estancia Basin;
- F. Investigate and recommend water resource management policies and strategies for consideration by the various governments with jurisdiction in the Estancia Basin;

- G. Promote and assist in public education programs about the conservation, preservation, and protection of the waters of the Estancia Basin;
- H. Prepare and submit an annual report to the County Commissions of BERNALILLO, SANTA FE, and TORRANCE Counties to describe the activities and achievements of the Estancia Basin Water Planning Committee; and
- I. Investigate potential future organizational structures based on joint powers agreement, special purpose district, regional authority, or other such arrangement.
- J. When necessary, develop and present alternative funding strategies for implementation with the Estancia Basin, subject to approval by any County whose jurisdiction is affected by such funding.
- K. Report periodically to the Middle Rio Grande Council of Governments for the purpose of maintaining regional coordination and cooperation in water resource planning and management.

SECTION 4. IMPLEMENTATION.

This Memorandum of Understanding will become effective upon the latest date of signature by the participating counties. A consensus regarding the membership of the Estancia Basin Water Planning Committee shall be reached within 60 days of the effective date of this Memorandum.

This Memorandum may be modified at any time by mutual consent of the participating counties. Any party to this Memorandum may withdraw by action of the respective County Commission.



 CHAIRMAN, BERNALILLO COUNTY COMMISSION

8/21/95


 DATE



 CHAIRMAN, SANTA FE COUNTY COMMISSION

7/11/95

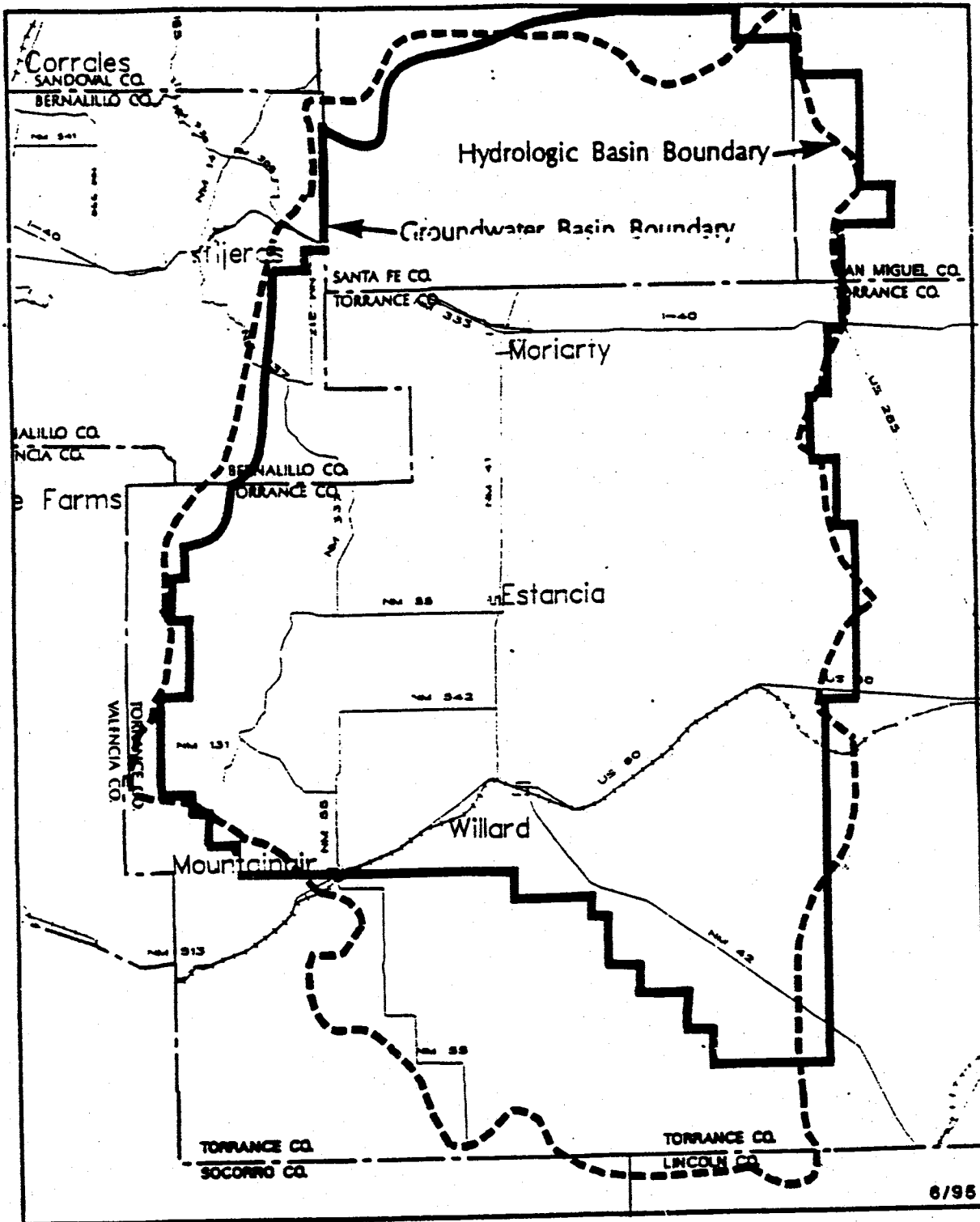
 DATE



 CHAIRMAN, TORRANCE COUNTY COMMISSION

8/23/95

 DATE



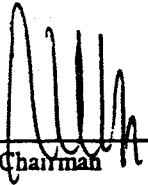
Estancia Underground Water Basin is declared and bounded by special orders of the N.M. State Engineer. The hydrologic basin boundary is taken from the Hydrologic Unit Map-1974: State of New Mexico, Cataloging Unit Code 13060001, U.S.G.S., 1976.

Estancia Basin



MEMORANDUM OF UNDERSTANDING FOR COORDINATED WATER RESOURCE
PLANNING IN THE ESTANCIA BASIN

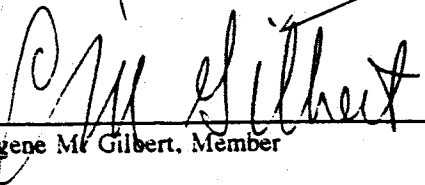
BERNALILLO COUNTY COMMISSION


Albert "Al" Valdez, Chairman

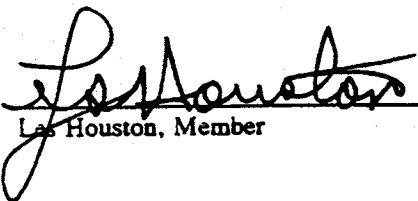

CHAIRMAN, SANTA FE COUNTY COMMISSION


Ken Sanchez, Vice-Chair

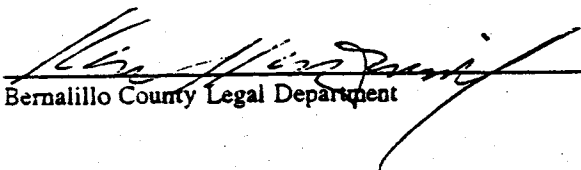

CHAIRMAN, TORRANCE COUNTY COMMISSION


Eugene M. Gilbert, Member

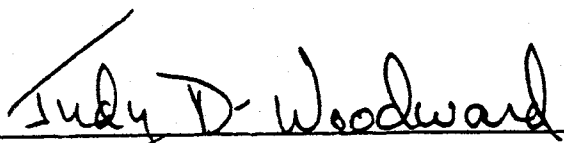

Barbara J. Seward, Member


Les Houston, Member

Approved as to form:


Bernalillo County Legal Department

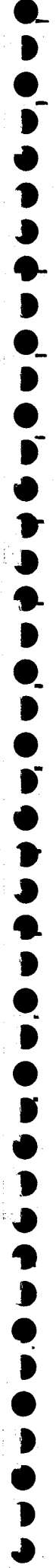
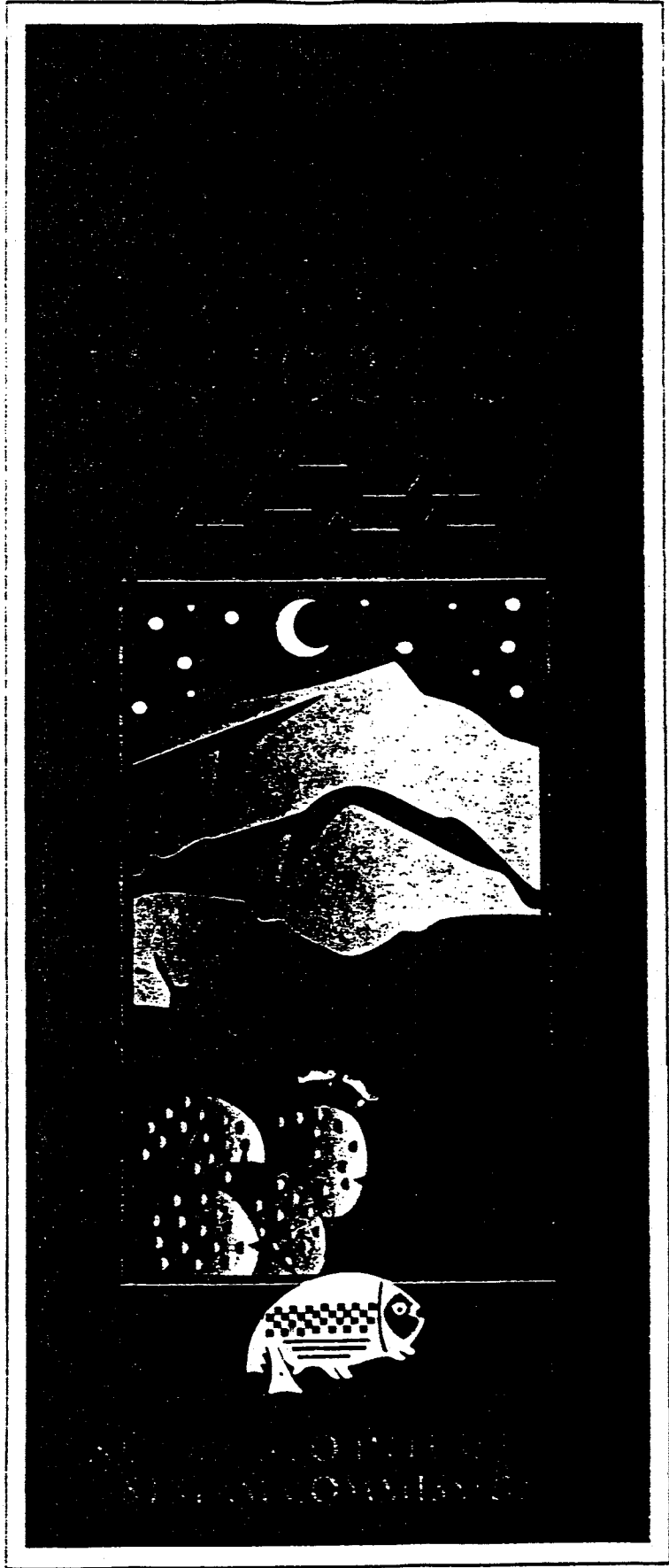
Attest:


Judy Woodward, County Clerk



APPENDIX B

**New Mexico Interstate Stream Commission Regional Planning
Handbook and Template**



REGIONAL
WATER
PLANNING
HANDBOOK

*New Mexico
Interstate Stream
Commission*

DECEMBER, 1994



NEW MEXICO
INTERSTATE STREAM
COMMISSION

BATAAN MEMORIAL BUILDING,
ROOM 101 STATE CAPITOL
POST OFFICE BOX 25102
SANTA FE, NEW MEXICO
87504-5102

COMMISSION MEMBERS

Albert E. Utton, Chairman,
Albuquerque

J. Phelps White III, Vice-
Chairman, Roswell

Eluid L. Martinez, Secretary,
Santa Fe

Tracy Seidman-Hephner,
Wagon Mound

Richard C. Johnson, Silver City

Palemon A. Martinez, Valdez

George M. Shoup, Carlsbad

Paulina Salopek, Las Cruces

Elbert Hamblin, La Plata

OPEN LETTER TO REGIONAL WATER PLANNING HANDBOOK USERS

New Mexico has taken a unique approach to planning to protect and preserve its water supply. The legislature recognized and directed that water planning is most effectively done at the local level. Regions, self-defined through hydrological and political common interests, have begun to study their most precious resource. This effort, overseen by the Interstate Stream Commission and funded through the Commission and local entities, now blankets the state.

The original impetus for regional water planning came in 1987, when a federal court ruled that New Mexico's prohibition against out-of-state transfer of New Mexico ground water was unconstitutional. As a result of this ruling, it became evident that New Mexico must actively plan for its water future. The resulting plans, with their forty-year horizon, help to insure the continuity of the water supply.

The diversity of approach in the previous regional water plans confirmed the Legislature's intuition that New Mexico communities relate to their water resources in very different ways. Some regions based their plans on traditional custom and culture; others looked at development needs; still others searched for a balance between the two. All regions struggled to develop effective public participation with limited resources and little infrastructure. In some regions, creative and energetic public involvement demonstrated the value of mobilizing the community to help in water planning. Other regions were unable to generate the public participation they sought. Their experience demonstrated the challenge of attempting democracy in a complex society, and the need for further development would affect their water needs. The great variety of assumptions underlying these projections and the significant gap between projected needs and available supply alerted the Commission to the need for a unified approach to water planning.

Responding to a request from regional water planners, the Commission appointed a sub-committee of Commissioner Palemon A. Martinez and Commissioner Tracy Seidman Hephner to direct the preparation of a Regional Water Planning Template to guide regional planners to a useful and uniform product. Also, the Commission appointed a volunteer work group to participate in the preparation of the Template and this Handbook. Co-chaired by Commissioners Palemon A. Martinez and Tracy Seidman Hephner, the work group was composed of fourteen individuals from diverse constituencies and regions, all with substantial background in water issues and management. The group was guided by the hands-on experience of the regional water planners and aided by the staffs of both the Commission and the State Engineer Office. Together, they have written this document, the Regional Water Planning Handbook, which has been formally adopted by the Interstate Stream Commission.

The Handbook presents assumptions, guidelines and a template for regional water planning. A workbook, available to regional planners on request, expands on the information with a detailed checklist, providing additional information and advice on the subjects found in the template.

Water is a fragile and finite resource. Water quality controls and conservation are the keys to protecting and preserving our water supply. A third and equally important factor is the participation, awareness and involvement of the people of the region. The planning process should encourage local people to express local concerns and discuss the difficult decisions faced by every community in New Mexico. Successful plans are marked by the support, understanding and consensus generated by the planning process.

We wish you well in your water planning endeavors.

New Mexico Interstate Stream Commission

We wish to thank the following for their assistance in the layout, cover art and formatting of this document: Chris Nunn, Christian Kenesson, the Regional Water Planning Dialogue, and the New Mexico Water Resources Research Institute staff.

The Commission wishes to expressly thank the following volunteer work group members that put in many hours of effort to participate in the preparation of the Regional Water Planning Handbook:

Bobby Creel, New Mexico
Water Resources
Research Institute

Gary Daves, City of
Albuquerque

Vickie Gabin, Sierra Club

Debbie Hughes, New Mexico
Association of Conservation
Districts

Michael Benson, Navajo
Nation, Department of
Water Resources
Management

Thomas Shelley, Phelps Dodge

Tony Mayne, Santa Fe
Metropolitan Water Board

Joe Quintana, Middle Rio
Grande Council of
Governments

Lee Tillman, Eastern Plains
Council of Governments

Fred Vigil, New Mexico
Acequia Commission

Randy Kirkpatrick, San Juan
Water Commission

Consuelo Bokum, New Mexico
Environmental Law Center

Michael Riley, Elephant Butte
Irrigation District

Hal Engle, New Mexico Rural
Water Users Association

CONTENTS

OPEN LETTER TO HANDBOOK USERS	2
I. PURPOSE OF REGIONAL WATER PLANS	5
II. REQUIRED ASSUMPTIONS	7
III. GENERAL GUIDELINES	10
LEGISLATIVE REQUIREMENTS	12
IV. REGIONAL WATER PLANNING TEMPLATE	13
Executive Summary	13
Introduction	14
Documentation of Public Involvement in Planning Process	14
Strategy chosen to maximize public involvement	14
Background Information	14
Legal Issues	15
Water Resources Assessment for the Planning Region	16
Water Demand	17
Water Plan Alternatives	18
Evaluations	18
GLOSSARY	19

I. PURPOSE OF REGIONAL WATER PLANS

Water planning, the budgeting of an essential and finite resource, is of course valuable in itself. In addition, these regional water plans may have specific applications which will affect how they are developed.

As has been done in other western states, New Mexico may decide to use the regional water plans as a basis for a state water plan, which can in turn influence litigation, water development, and legislation. Thus, the plans need to be written so that they can be merged into one document. To fulfill this purpose, the plans should have a uniform approach to the extent possible.

The Commission strongly encourages regions to negotiate solutions to local water problems.

The State Engineer's mandate is to supervise the measurement, appropriation and distribution of the state's waters. The State Engineer's mandate includes considering the public welfare of the state.¹ Public welfare and conservation considerations may differ depending upon local conditions and factors, as well as impacts state wide.

Elements of regional water plans may contain relevant and substantive elements for use by the State Engineer in "public welfare" and "conservation" determinations in actions before the State Engineer within the regional planning area or affecting the area. These elements in a regional water plan would not necessarily be determinative but rather part of a larger set of considerations that are applicable to a given action.

¹ N.M. Stat. Ann. §72-5-5.1, §72-5-6, §72-5-7, §72-5-23, §72-12-3, and §72-12B-1

Broad public participation is necessary in the development of regional water plans to enhance their acceptance locally and to increase their potential contribution to state decision making in regard to "public welfare" and "conservation" determinations.

The regional water plans should not be considered substitutes for local zoning and platting decisions made by the appropriate governmental authority. Local zoning decisions shall be given due consideration in regional water planning in determining what "public welfare" interests are for each particular jurisdiction.

New Mexico statutes provide that, for a state to prefer its own citizens over an out-of-state appropriator, there must be a showing of need within the state and the feasibility of supplying that need from particular sources.² Water planning by region may well be used as evidence on such issues. Planners should be aware that assertions of need and feasibility of supply may be tested in a court setting, and should therefore be reliable, specific, technically sound, and based on generally acceptable hydrologic and engineering principles. Bare or vague claims of growing water use, or unsupported allegations of rights to, or hopes for, new supply for the region are not useful for sound water planning.

Assessment, as used herein for regional water planning purposes, is best defined by the following:

- 1 inventory of quantity and quality of water resources;
- 2 population projections and other water resource demands under a range of conditions;
- 3 determination of the manner in which water requirements for the projected demands might be met with management and conservation of water supplies available to the region under existing rights, water supplies, interstate agreements, and court decrees.

2 N.M. Stat. Ann. §72-12B-1 (1985 Repl. Pamp.)

II. REQUIRED ASSUMPTIONS

All planning shall be done within the following parameters. Exceptions to this are possible, but if an exception is to be made, regional water planners must set forth facts and justification sufficient to indicate that conditions exist within the region to consider such an exception.

1. An adequate plan for public participation shall be a prerequisite for regional water planning.
2. Plans shall be written on the assumption that New Mexico and federal water law will not change.

In the section entitled "Suggested Changes in New Mexico Law" regions are invited to propose changes to New Mexico water law. The more specific these proposed changes are, the more helpful they will be. Such proposed changes should not be relied upon in plan recommendations, although the reasons and effects of changes should be presented to justify the recommended change.

3. Plans shall presume all future water needs must be met by management of the water supply currently available to the region. If that is not feasible, as supported by analysis in the planning report, other sources of supply may be proposed if feasible in economic and engineering analysis.
4. Water conservation should be the first item considered among feasible water supply alternatives in the management of water to meet current and future water demands. Regional water plans should demonstrate what portion of the future water demand could be met from projections of conserved water. Regional water plans should outline the responsibilities and authorities of each local governing body.
5. Population projections shall be based on the Bureau of Business and Economic Research (BBER) model, with any deviations from that model justified. BBER projections and any exceptions shall be reviewed within the public participation program and with Commission staff.

6. Analysis of water use shall be broken out into the following categories:

A. PUBLIC WATER SUPPLY:

All water utilities, publicly or privately owned, which have at least 15 service connections or regularly serve an average of at least 25 individuals daily at least 60 days out of the year. (Safe Water Drinking Act, 1986.) Water used for the irrigation of self-supplied playing fields, golf courses and parks or to maintain the water level in ponds and lakes owned and operated by a municipality which is a public water supplier is also included in this category.

B. DOMESTIC:

Self-supplied residences which may be single family homes or multiple housing units with less than 25 occupants, where water is used for normal household purposes such as drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns and gardens supplied from a domestic source. Also includes water used by that segment of the population which is served by small community water systems for which reliable population and water use data are unavailable.

C. IRRIGATED AGRICULTURE:

All diversions of water for the irrigation of crops grown on farms and ranches.

D. LIVESTOCK:

Water used to raise livestock, maintain self-supplied livestock facilities, and provide for on-farm processing of poultry and dairy products, and evaporation from stock tanks.

E. COMMERCIAL:

Self-supplied businesses (e.g., motels, restaurants) and institutions (e.g., schools and hospitals), public or private, involved in the trade of goods or provision of services. Self-supplied greenhouses and nurseries primarily engaged in selling products to the general public which are produced on the same premises from which they are sold.

F. INDUSTRIAL:

Self-supplied enterprises engaged in the processing of raw materials (organic or inorganic solids, liquids, or gases) or the manufacturing of durable or nondurable goods. Water used for the construction of highways, subdivisions and other construction projects is also included.

G. MINING:

Self-supplied enterprises engaged in the extraction of minerals occurring naturally in the earth's crust; solids, such as coal and smelting ores; liquids, such as crude petroleum; and gases, such as natural gas. Water used for oil and gas well drilling, secondary recovery of oil, quarrying, milling (crushing, screening, washing, flotation, etc.) and other processing done at the mine site, or as part of a mining activity is included as well as water removed from underground excavations and stored in, and evaporated from, tailings ponds. Mining also includes water used to irrigate new vegetative covers at former mine sites which are being reclaimed. Mine dewatering is included as a use if said water is consumed in some manner such as evaporation ponds. It does not include the processing of raw materials such as smelting ores unless this activity occurs as an integral part of, and is physically contiguous with, a mining operation.

H. POWER:

All self-supplied power generating facilities.

I. RESERVOIR EVAPORATION:

Net evaporation from man-made reservoirs, not including stock tank evaporation.

J. FISH, WILDLIFE AND RECREATION:

All self-supplied playing fields, golf courses and parks, water needed to hold a minimum water level in reservoirs for recreation, fish and wildlife, water used for crops grown for wildlife consumption and self-supplied recreation parks, campgrounds and fish hatcheries.

III.

GENERAL GUIDELINES

In developing the regional water plan, and determining what information is relevant to what level of detail, planners should keep the following things in mind:

1. The heart of the exercise is for the region to provide enough information, analysis and documentation to answer the following questions.
 - a. What is the region's available water supply?
 - b. What is the region's future water demand?
 - c. How will the region undertake to meet demand with supply?
2. Not all items of information in the Regional Water Planning Template apply in every region. Planners should not spend time and money including information that addresses matters that are not applicable to their region.

For example, if a region does not include Tribal or Pueblo holdings, no information in categories related to such holdings would be included in the plan.
3. The amount of detail included in the plan concerning any category should be reasonably related to the importance of that factor to water planning.

For example, the Regional Water Planning Template calls for information concerning the location of present water uses. That request does not require a full-fledged hydrographic survey, but does call for a compilation of existing data and documentation on that subject.
4. In assessing what categories are necessary and what should be included, planners shall focus on the following:
 - a. Location, quality, and extent of the current water resource supply.
 - b. Current water use, including specific categories of use (See II.6.).

- c. Projections of future water use, quantified.
- d. Impacts of conservation on water use, including i.) the suitability of conservation measures for each region, and, ii.) the projected water savings for each measure evaluated.
- e. Source and quality of future water supply including i.) cost effectiveness, technical feasibility, and social and political issues of using the identified future water source, and ii.) potential for water supply contamination.
- f. Current water rights status.
- g. Methods used to solicit public involvement in developing the water plan.

The final report shall contain an executive summary that includes the information in items a. through g. above, any other summary information, and the conclusions and recommendations of the report.

5. In determining available water supply, planners must consider both hydrological and legal limitations.
For example, if water must be delivered downstream under an interstate compact, that water cannot be considered as supply available for the region.
6. All plans shall be developed in consultation with Commission staff.

7. A critical element of the regional water plan is public participation in the planning process. Planners must demonstrate that reasonable and diligent efforts have been made to reach the public so as to invite, value and reflect public comment. These efforts may be tailored in their specifics to fit the particular regions. All regional plans, however, must reflect:
 - a. Identification of stakeholders in the planning process, and efforts to make specific invitations to those stakeholders to participate. A list of these entities, together with any support or refusal letters from them, shall be part of the plan's documentation.
 - b. Public meetings of a number, time and place calculated to maximize the ability of the public to participate. Notice of these meetings must be widely disseminated, including specific notice to entities on the list generated under a., above. The public meetings shall occur while the plan is being developed.
 - c. Post-plan comment period. When a draft plan has been completed, it must be made available to all entities identified on the list. Copies of the draft plan must also be made available at public places, and notice of their availability promulgated. After a sufficient time of study of the draft, public meetings shall be held to receive comments on the draft.

LEGISLATIVE REQUIREMENTS FOR REGIONAL WATER PLANNING

Section 2 of the Act³ provides as follows:

"C. The Commission is authorized to make grants or loans of funds for the purpose of regional water planning. Prior to approval of any proposal by a region for planning funds under this section, the Commission shall develop criteria for evaluating such proposals. These criteria at a minimum shall provide for:

- (1) identification of the region requesting planning funds and why it is hydrologically and politically an appropriate applicant;
- (2) use of an appropriate planning process including opportunities for participation by those Indian tribes located within the various regions of the state;
- (3) reasonable proposed costs and time tables for completion of the planning process;
- (4) appropriate provisions for notice, review and comment where applicable;
- (5) adequate review of potential conflict with laws relating to impact on existing water rights;
- (6) adequate review of water conservation and the effect on the public welfare; and
- (7) identification of sources other than the Commission for funding of the proposed regional planning process.

D. A water planning region eligible for funding under this criteria is an area within the state that contains sufficient hydrological and po-

litical interests in common to make water planning feasible. The state as a whole shall not be considered a water planning region for purposes of this section.

E. No entity shall be made a part of a proposal for planning funds under this section without its consent.

F. No funds shall be granted under this act to any party or parties that are not within a water planning region. Whether a proposal for funding falls within a water planning region shall be determined on a case by case basis by the Commission after consultation with the state engineer and consideration of the following:

- (1) whether the source of water and the potential place of use of the water are located within the same hydrologic basin; and
- (2) if there is more than one party and the parties are requesting funds on a joint basis, whether the parties have demonstrated political and economic interests in common by entering into a binding intergovernmental agreement for carrying out the planning process."

³ N.M. Stat. Ann. §72-14-44 (1993 Cum. Sup.)

IV.

REGIONAL WATER PLANNING TEMPLATE

The template for a regional water plan was designed to provide uniformity in developing regional planning documents. The Commission expects to use the plans to ensure an adequate supply of water for each region of the state. This objective will be enhanced if plans are based on the same format and assumptions and are comparable to one another. The template contains a listing of the topic headings for consideration and, where applicable, addressed by every regional planning entity.

Also, a Regional Water Planning Checklist is available for planners upon request to the Interstate Stream Commission. The checklist is organized to correspond with the Regional Water Planning Template. The checklist is not intended as a list of requirements. Rather, it is intended as a tool to help planners ensure that all pertinent considerations are addressed.

Executive Summary

The Executive Summary is likely to be the part of the plan which will be most widely read and disseminated publicly. The summary should therefore be a brief, clearly presented short version of the findings and recommendations of the plan, which could be read and understood separately from the fully documented version. It should contain a statement on public participation efforts and results, statements on water supply and water demand and the plan's final recommendation to reconcile the two.

- ◆ Description of planning process
- ◆ Findings
 - ◆ Water supply
 - ◆ Water demand
- ◆ Water plan alternatives
- ◆ Recommended water plan for the region

Introduction

The introduction should provide the reader with the following:

- ◆ Individuals involved in water plan development
- ◆ Previous water planning in the region
- ◆ The water plan's contents

Documentation of public involvement in planning process

- ◆ Interstate Stream Commission-sponsored water workshop
- ◆ Background summary of region prepared for public dissemination
- ◆ List of stakeholders and participants

Strategy chosen to maximize public involvement

- ◆ Use of the media
- ◆ Press releases
- ◆ Outreach effort tailored to specific communities
- ◆ Project time table
- ◆ Public meetings

Background information

a. Description of the region

- ◆ Location, boundaries
- ◆ Geography, landscape
- ◆ Climate
- ◆ Natural resources
- ◆ Major surface and groundwater sources
- ◆ Demographics
- ◆ Economic picture
- ◆ Land ownership & land use

b. Historical overview of water use in region

Legal issues

a. Water laws relevant to region

- ◆ state
- ◆ federal
- ◆ tribal

b. Federal legal issues

- ◆ Federal reservations
 - ◆ Indian reservations or pueblos
 - ◆ Other federal enclaves
- ◆ Federal environmental law issues
- ◆ Treaties
- ◆ Federal water projects

c. Water quality standards

- ◆ Federal
- ◆ State
- ◆ Municipal
- ◆ Tribal or pueblo

d. Relevant lawsuits

- ◆ Court decrees
- ◆ Pending adjudications

e. Water rights administration policies specific to the region

- ◆ Duty and consumptive use figures
- ◆ Ground water basin criteria
- ◆ Compact obligations

f. Special districts

g. Legal issues needing resolution

h. Local conflicts

Water resources assessment for the planning region

a. Water supply

- ◆ Surface water
 - ◆ Precipitation data
 - ◆ Drainage basins and watersheds
 - ◆ Streamflow data
 - ◆ Evaporation data
 - ◆ Surface water yields
 - ◆ Storage reservoirs and conveyance canals
 - ◆ capacity
 - ◆ evaporation
 - ◆ useful life
- ◆ Ground water
 - ◆ Geologic data
 - ◆ Hydrogeology data by aquifer
 - ◆ Well field data
 - ◆ Ground water yields by aquifer
 - ◆ Sustainable yields
 - ◆ Drawdowns by level of development

b. Water quality issues

- ◆ Assess quality of water sources
- ◆ Identify sources of contamination
- ◆ Assess feasibility of water quality management plans
 - ◆ Improving water and land-use practices
 - ◆ Water treatment alternatives
 - ◆ Wastewater treatment

c. Summary of water supply considering legal limitations

Water demand

a. Present uses

- ◆ Type, location and ownership of water rights
- ◆ Water rights by category of use
- ◆ Water diversions by category of use
- ◆ Water depletions by category of use
- ◆ Public water supply systems data
- ◆ Irrigation practices
- ◆ Conveyance losses
- ◆ Return flows
- ◆ Lake evaporation
- ◆ Riparian uses/instream flows

b. Future water uses by 40 year planning horizon

- ◆ Projected future demographics
 - ◆ Population
 - ◆ Future land use
 - ◆ Economic growth and jobs
- ◆ Projected water demands by category of use
- ◆ Future sources of water supply
- ◆ Projected changes in water supplies in region
- ◆ Management alternatives to increase supply
 - ◆ Changes to existing works
 - ◆ Replacement of existing facilities
 - ◆ Water banking
- ◆ Emergency contingency plans
 - ◆ Drought considerations
 - ◆ Flood considerations

c. Water conservation

- ◆ Conservation measures
- ◆ Suitability of each measure assessed for region
- ◆ Amounts and timing of water saved
- ◆ Effect on return flows
- ◆ Difficulty (including costs) and timing of implementation

d. Summary of present and future water demand

Water plan alternatives

- a. Each proposed alternative should include a description of specific and practical means by which the supply of the region may be reconciled with the present and future demands of the region, as analyzed above. Alternatives should contain:
 - ◆ Management component
 - ◆ Water conservation component
 - ◆ Water development component
 - ◆ Infrastructure development component
 - ◆ Water quality management plan
- b. Each alternative should be analyzed on the following bases:
 - ◆ Social issues and evaluation (public welfare)
 - ◆ Political issues and evaluation
 - ◆ Institutional evaluation

Evaluations

- a. Each proposed alternative must be evaluated in accordance with the standards below:
 - ◆ Technical feasibility
 - ◆ Political feasibility
 - ◆ Social and cultural impacts
 - ◆ Financial feasibility
 - ◆ Implementation schedule
 - ◆ Physical, hydrological and environmental impacts

ACRE-FOOT: Volume of water required to cover 1 acre of land (43,560 square feet) to a depth of 1 foot, equivalent to 325,851 gallons.

ALLUVIUM: General term for deposits of clay, silt, sand, gravel, or other particulate material deposited by a stream or other body of running water in a streambed, on a flood plain, on a delta, or at the base of a mountain.

AQUACULTURE: Art and science of farming organisms that live in water, such as fish, shellfish, and algae.

AQUIFER: A geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

ARTESIAN WATER: Ground water under sufficient pressure to rise above the level at which the water-bearing bed is reached in a well. The pressure in such an aquifer commonly is called artesian pressure, and the formation containing artesian water is an artesian aquifer.

ARTIFICIAL RECHARGE: The addition of water to the ground water reservoir by man's activities, such as irrigation or induced infiltration from streams or wells.

AVERAGE ANNUAL YIELD (WATER): The average annual supply of water produced by a given stream or water development over a period of 12 months.

BANK STORAGE: Water absorbed and stored in the banks of a stream, lake, or reservoir when the stage rises above the water

table in the bank formations and stays there for an appreciable length of time. Bank storage may be returned in whole or in part as seepage back to the water body when the level of the surface water returns to a lower stage.

BASE FLOW: Sustained or fair-weather runoff—generally that portion of the streamflow derived from discharging ground water or other delayed sources such as lakes or snow fields.

BEDLOAD: That part of the sediment load in which the particles of material move on or near the stream bed.

BEDROCK: General term for consolidated (solid) rock that underlies soils or other unconsolidated material.

BENEFICIAL USE OF WATER: The use of water by man for any purpose which benefits are derived, such as domestic, municipal, irrigation, livestock, industrial, power development, and recreation. Under the New Mexico constitution beneficial use is the basis, the measure and the limit of the right to use water; therefore, beneficial use of public water di-

verted or impounded by manmade works is an essential element in the development of a water right.

BIOCHEMICAL OXYGEN DEMAND (BOD): The quantity of oxygen utilized primarily in the biochemical oxidation of organic matter in a specified time and at a specified temperature.

BOLSON: An alluvium-floored basin, depression, or wide valley, mostly surrounded by mountains and drained by a system that has no surface outlet. Bolson fill is the alluvial detritus that fills a bolson—also commonly called bolson deposits.

CENTER-PIVOT IRRIGATION: See Irrigation.

CHEMIGATION: Application of pesticides or fertilizers to farmlands through irrigation systems.

CLOSED BASIN: A basin is considered closed with respect to surface flow if its topography prevents the occurrence of visible outflow. It is closed hydrologically if neither surface nor underground outflow can occur.

GLOSSARY

- CONFINING BED:** A rock formation that will not readily transmit water and which retards or stops the free movement of water underground. Confining beds have also been called aquicludes, aquitards, or semiconfining beds.
- CONJUNCTIVE WATER USE:** Combined use of ground water and surface water.
- CONSUMPTIVE IRRIGATION REQUIREMENT (CIR):** The quantity of irrigation water, exclusive of precipitation, stored soil moisture, or ground water that is required consumptively for crop production.
- CONSUMPTIVE USE (EVAPOTRANSPIRATION):** The quantity of water used in a given area in transpiration, building of plant tissue, and evaporated from adjacent soil, water surface, snow or intercepted precipitation in a specific period of time.
- CONVEYANCE LOSS:** Water that is lost in transit from a canal, conduit, or ditch by leakage or evaporation. Generally, the water is not available for further use; however, leakage from an irrigation ditch, for example, can percolate to a groundwater source and be available for further use.
- CUBIC FOOT PER SECOND:** The rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second. It is equivalent to 7.48 gallons per second, or 448.8 gallons per minute.
- DECLARED UNDERGROUND WATER BASIN:** An area of the state proclaimed by the State Engineer to be underlain by a ground water source having reasonably ascertainable boundaries. By such proclamation the State Engineer assumes jurisdiction over the appropriation and use of ground water from the source.
- DEPLETION:** That part of a withdrawal that has been evaporated, transpired, incorporated into crops or products, consumed by man or livestock, or otherwise removed.
- DISCHARGE:** Rate of flow at a given instant in terms of volume per unit of time; pumping discharge equals pumping rate, usually given in gallons per minute (gal/min); stream discharge, usually given in cubic feet per second (ft³/s). With respect to water underground, the movement of water out of an aquifer. Discharge may be natural, as from springs, as by seepage, or by evapotranspiration, or it may be artificial as by constructed drains or from wells.
- DISSOLVED OXYGEN:** The amount of free (not chemically combined) oxygen in water. Usually expressed in milligrams per liter.
- DISSOLVED SOLIDS:** Chemical compounds in solution.
- DIVERSION:** A turning aside or alteration of the natural course of a flow of water, normally considered physically to leave the natural channel. In some States, this can be a consumptive use direct from a stream, such as by livestock watering. In other States, a diversion must consist of such actions as taking water through a canal or conduit.
- DOMESTIC WATER USE:** Water for normal household purposes, such as drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns, gardens and livestock supplied from a domestic source. Also called residential water use. The water can be obtained from a public supply or be self-supplied.
- DRAINAGE BASIN:** A part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.
- DRAWDOWN (GROUND WATER):** The depression or decline of the water level or potentiometric surface in a pumped well or in nearby wells caused by pumping. At the well, it is the vertical distance between the static and the pumping level.
- DRIP IRRIGATION:** See Irrigation.
- DRYLAND FARMING:** Practice of crop production without irrigation in semiarid regions usually by using moisture-conserving farming techniques.
- EPHEMERAL STREAM:** A stream or portion of a stream which flows only in direct response to precipitation. Such flow is usually of short duration. Most of the dry washes of the region may be classified as ephemeral streams.
- EVAPORATION:** Process by which water is changed from the liquid state to the vapor state. See also Evapotranspiration; Transpiration.

- EVAPORATION, NET RESERVOIR:** The evaporative water loss from a reservoir after making allowance for precipitation on the reservoir. Net reservoir evaporation equals the total evaporation minus the precipitation on the reservoir surface.
- EVAPOTRANSPIRATION:** The process by which water is returned to the air through direct evaporation or by transpiration of vegetation.
- FALLOW:** Cropland, either tilled or untilled, allowed to lie idle, during the whole or the greater part of the growing season.
- FARM EFFICIENCY:** The consumptive crop irrigation requirement divided by the farm delivery.
- FECAL COLIFORM BACTERIA:** Bacteria that are present in the gut or the feces of warmblooded animals; they are indicators of possible sewage pollution.
- FLOOD IRRIGATION:** See Irrigation.
- FLOOD PLAIN:** Land bordering a stream. The land was built up of sediment from overflow of the stream and is still subject to flooding when the stream is at flood stage.
- FREE-FLOWING WELL:** An artesian well in which the potentiometric surface is above the land surface. See also Potentiometric surface.
- FRESHWATER:** Water that contains less than 1,000 mg/L (milligrams per liter) of dissolved solids; generally, more than 500 mg/L is considered undesirable for drinking and many industrial uses.
- FURROW IRRIGATION:** See Irrigation.
- GAGING STATION:** A particular site on a stream, canal, lake or reservoir where systematic observations of gage height or discharge are made.
- GAINING STREAM:** A river, or reach of a stream or river, that gains flow from ground water seepage or from springs in, or alongside, the channel--sometimes called an effluent stream.
- GRAVITY IRRIGATION:** See Irrigation.
- GROUND WATER:** Generally, all subsurface water as distinct from surface water; specifically, that part of the subsurface water in the saturated zone (a zone in which all voids, large and small, ideally are filled with water under pressure equal to or greater than atmospheric).
- GROUND WATER MINING:** The condition that exists when the withdrawal of water from an aquifer exceed the recharge causing a decline in the ground water level.
- GROUND WATER RECHARGE:** The addition of water to the zone of saturation. Infiltration of precipitation and its movement to the water table is one form of natural recharge.
- GROUND WATER RESERVOIR STORAGE:** The amount of water in storage within the defined limit of the aquifer.
- HYDRAULIC GRADIENT (GROUND WATER):** The gradient or slope of the water table or potentiometric surface in a specific direction.
- HYDROELECTRIC POWER:** Electrical energy generated by means of a power generator coupled to a turbine through which water passes.
- HYDROGRAPH:** A graph showing the stage, flow, velocity, or other property of water with respect to the passage of time. Hydrographs of wells show the changes in water levels during the period of observation.
- IMPERMEABLE:** Not capable of transmitting fluids or gases in appreciable quantities. Few rocks are completely impermeable; but some—such as unweathered granite, dense basalt, welded tuff, dense limestone, and well-cemented conglomerate—may be so considered for practical purposes.
- INTERBASIN TRANSFER OF WATER:** See Water exports; Water imports.
- INTERMITTENT STREAM:** A stream which flows for only a part of the time. Flow generally occurs for several weeks or months in response to seasonal precipitation, due to ground water discharge, in contrast to the ephemeral stream that flows but a few hours or days following a single storm.
- IRRIGATED AREA:** The gross area upon which water is artificially applied.
- IRRIGATION:** Generally, the controlled application of water to arable lands to supply water requirements of crops not satisfied by rainfall. (See also Irrigation water use.) Systems used include the following:
- Center-pivot:** Automated sprinkler irrigation achieved by rotating the sprinkler pipe or boom, supplying water to the sprinkler heads or nozzles, as a radius from the center of the circular field to be irrigated. The pipe is supported above the crop by towers

at fixed spacings and propelled by pneumatic, mechanical, hydraulic, or electric power on wheels or skids in fixed circular paths at uniform angular speeds. Water, which is delivered to the center or pivot point of the system, is applied at a uniform rate by progressive increase of nozzle size from the pivot point of the system to the end of the line. The depth of water applied is determined by the rate of travel of the system. Single units are ordinarily about 1,250 to 1,300 feet long and irrigate about a 130-acre circular area.

Drip: An irrigation system in which water is applied directly to the root zone of plants by means of applicators (orifices, emitters, porous tubing, perforated pipe, and so forth) operated under low pressure. The applicators can be placed on or below the surface of the ground or can be suspended from supports.

Flood: The application of irrigation water where the entire surface of the soil is covered by ponded water.

Furrow: A partial surface flooding method of irrigation normally used with clean-tilled crops where water is applied in furrows or rows of sufficient capacity to contain the design irrigation stream.

Gravity: Irrigation in which the water is not pumped but flows in ditches or pipes and is distributed by gravity.

Sprinkler: A planned irrigation system in which water is applied by means of perforated pipes or nozzles operated under pressure so as to form a spray pattern.

Subirrigation: A system in which water is applied below the ground surface either by raising the water table within or near the root zone or by using a buried perforated or porous pipe system that discharged directly into the root zone.

Traveling gun: Sprinkler irrigation system consisting of a single large nozzle that rotates and is self-propelled. The name refers to the fact that the base is on wheels and can be moved by the irrigator or affixed to a guide wire.

IRRIGATION CONVEYANCE LOSS: The loss of water in transit from a reservoir, point of diversion, or ground water pump to the point of use, whether in natural channels or in artificial ones, such as canals, ditches, and laterals.

IRRIGATION EFFICIENCY: The percentage of the water diverted from a water source that is consumed. It is the product of the distribution efficiency and the farm efficiency.

IRRIGATION LEACHING REQUIREMENT: The amount of water required to move residual salts out of the root zone and maintain an adequate soil-salt balance for crop production.

IRRIGATION REQUIREMENT: The quantity of water, exclusive of precipitation, that is required for production of a specific crop.

IRRIGATION RETURN FLOW: Part of irrigation water that is not consumed by evapotranspiration and that drains from the irrigated area to an aquifer or surface-water body.

IRRIGATION WATER USE: Artificial application of water on lands to assist in the growing of crops

and pastures or to maintain vegetative growth on recreational lands such as parks and golf courses. See also Irrigation.

KARST: A type of topography that is formed on limestone, dolomite, gypsum beds, and other rocks by dissolution and is characterized by closed depressions, sinkholes, caves, and underground drainage.

LOSSES INCIDENTAL TO IRRIGATION: The quantity of water depleted by irrigation in excess of the beneficial irrigation consumptive use.

MILLIGRAMS PER LITER: The weight in milligrams of any substance contained in 1 liter of liquid. (Equivalent to parts per million for values less than about 7,000 mg/L.)

MILLION GALLONS PER DAY: A rate of flow of water of one million gallons per twenty four hour period.

OVERDRAFT: Withdrawals of ground water at rates perceived to be excessive. See also Ground-water mining.

PER CAPITA USE: The average amount of water used per person during a standard time period, generally per day.

PERCHED GROUND WATER: Water in a saturated zone of material underlain by a relatively impervious stratum which acts as barrier to downward flow and which is separated from the main ground water body by a zone of unsaturated material above the main ground water body.

PERENNIAL STREAM: A stream that normally has water in its channel at all times.

PHREATOPHYTE: A plant that habitually obtains its water supply from the zone of saturation, either directly or through the capillary fringe.

PLAYA: Flat-floored bottom of an undrained desert plains basin.

POROSITY: The ratio of the total volume of pore space (voids) in a rock or soil to its total volume, usually stated as a percentage. Effective porosity is the ratio of the volume of interconnected voids to the total volume. Unconnected voids contribute to total porosity but are ineffective in transmitting water through the rock.

POTABLE WATER: Water that is safe and palatable for human consumption.

POTENTIOMETRIC SURFACE: An imaginary surface representing the static head of ground water in tightly cased wells that tap a water-bearing rock unit (aquifer); or in the case of unconfined aquifers, the water table.

PRECIPITATION: Includes atmospheric hail, mist, rain, sleet and snow which descends upon the earth; the quantity of water accumulated from the above events.

RECHARGE: The addition of water to an aquifer by infiltration, either directly into the aquifer or indirectly by way of another rock formation. Recharge may be natural, as when precipitation infiltrates to the water table, or artificial, as when water is injected through wells or spread over permeable surfaces for the purpose of recharging an aquifer.

RECOVERABLE GROUND WATER: The amount of water which may be physically and economically withdrawn from the ground water reservoir.

RECYCLED WATER: Water that is used more than one time before it passes back into the natural hydrologic system.

RETURN FLOW: That part of a diverted flow which is not consumptively used and which returns to a water body.

RIPARIAN VEGETATION: Vegetation growing on the banks of a stream or other body of surface water.

RUNOFF: The part of the precipitation that appears in surface streams.

SALINE WATER: Water that contains more than 1,000 milligrams per liter of dissolved solids. It generally is considered unsuitable for human consumption and less desirable for irrigation because of its high content of dissolved solids. Salinity generally is expressed as milligrams per liter (mg/L) of dissolved solids, with 35,000 mg/L defined as seawater. A general salinity scale is:

SALINITY	DISSOLVED SOLIDS (MG/L)
Slight	1,000-3,000
Moderate	3,000-10,000
Very	10,000-35,000
Brine	more than 35,000

SALTWATER INTRUSION: Replacement of freshwater by saline water in an aquifer or body of water.

SALVAGED WATER: The part of a particular stream or other water supply that is saved from loss and made available for use.

SEWAGE: Waste matter carried off by sewers and drains.

SEWAGE TREATMENT: The processing of wastewater for the removal or reduction in the level of dissolved solids or other undesirable constituents.

SEWAGE-TREATMENT RETURN FLOW: Water returned to the hydrologic system by sewage-treatment facilities.

SPECIFIC CAPACITY: In ground water hydrology, the yield of a well in gallons per minute per foot of drawdown after a period of sustained pumping.

SPRINKLER IRRIGATION: See Irrigation.

STOCK POND/TANK: Any manmade or natural catchment used exclusively for livestock watering. Generally, for purposes of determining permitting requirements, a stock pond/tank either within a water course or off-stream that is used exclusively for livestock, of 10 acre-feet or less regardless of height, does not require a permit. However, there are basins in the state that require permitting in any case, so checking with the State Engineer is advised.

STREAM, PERENNIAL: A stream that flows continuously.

STREAMFLOW: The discharge that occurs in a natural channel of a surface stream course.

SUBIRRIGATION: See Irrigation.

SURFACE WATER: An open body of water, such as a stream or a lake.

SUSPENDED SEDIMENT: Sediment that is transported in suspension by a stream. Fragmental material, both mineral and organic, that is maintained in suspen-

sion in water by the upward components of turbulence and currents and (or) by colloidal suspension.

TAILWATER RECOVERY: Process of collecting irrigation water runoff for reuse.

THERMOELECTRIC POWER: Electrical power generated by using fossil-fuel (coal, oil, or natural gas), geothermal, or nuclear energy.

TOTAL DISSOLVED SOLIDS (TDS): An aggregate of carbonates, bicarbonates, chlorides, sulfates, phosphates, nitrates, etc., of calcium, magnesium, manganese, sodium, potassium, and other cations which form salts. High TDS solutions have the capability of changing the chemical nature of water. High TDS concentrations exert varying degrees of osmotic pressures and often become lethal to the biological inhabitants of an aquatic environment. The common and synonymously used term for TDS is "salt".

TOTAL SEDIMENT LOAD: The sum of the bedload and the suspended sediment load.

TRANSMISSIBILITY (GROUND WATER): The rate at which water at the prevailing water temperature is transmitted through a unit width of the aquifer under a unit hydraulic gradient. It is generally expressed as gallons per day through a vertical strip of the aquifer 1 foot wide under a hydraulic gradient of 1 foot per foot, or more recently as cubic feet per day under the same conditions. It replaces the term "coefficient of transmissibility".

TRANSPIRATION: Process by which water absorbed by plants, usually through the roots. The residual water vapor is emitted into the atmosphere from the plant surface. See also Evaporation; Evapotranspiration.

TRAP EFFICIENCY OF RESERVOIRS: Ratio of sediment retained to sediment inflow expressed as a percentage.

TURBIDITY: The opaqueness or reduced clarity of a fluid due to the presence of suspended matter.

WASTEWATER: Water that contains dissolved or suspended solids as a result of human use.

WATER BUDGET: An accounting of the inflow to, outflow from, and storage changes of water in a hydrologic unit.

WATER EXPORTS: Artificial transfer (pipe, canals) of water to one region or subregion from another.

WATER RIGHT: Legal rights to use a specific quantity of water, on a specific time schedule, at a specific place, and for a specific purpose.

WATER TABLE: The upper surface of zone of saturation. See also Potentiometric Surface.

WETLANDS: Lands that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support and that, under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions.

WITHDRAWAL: Water removed from the ground or diverted from a surface-water source for use.

ZONE OF SATURATION: The zone in which all the connected interstices or voids in permeable rock or soil formation are filled with water under pressure equal to, or greater than atmospheric pressure.



APPENDIX C

Public Participation Reports

PUBLIC COMMUNICATION OUTREACH FOR ESTANCIA BASIN DRAFT WATER PLAN:

June, 1998

- Announcement of Public Meetings in Claunch-Pinto SWCD Newsletter. Total Contacts: 1,350
- Conservation Corner Article in Estancia Valley Citizen. Total Contacts: 2,500

July, 1998

- Brochures included in Town of Mountainair, Town of Estancia, Cooperative Extension Service, and Claunch-Pinto SWCD mailings. Total Contacts: 4,000
- "Watch for Public Meetings on Draft Water Plan" included in Central NM Electric Coop. billings. Total Contacts: 14,000
- Conservation Corner Article in Estancia Valley Citizen. Total Contacts: 2,500
- News Article concerning the EBWPC monthly meeting and public meetings. Total Contacts: 2,500

September, 1998

- Announcement of Public Meetings for Draft Water Plan in the Claunch-Pinto SWCD newsletter. Total Contacts: 1,350

October, 1998

- News Article in the Estancia Valley Citizen concerning EBWPC monthly meeting and giving the dates of the Public Meetings for October 26-30.
- Flyers were included in Central NM Electric Coop. billings for the month of October. Total Contacts: 14,000
- Placed a 1/2 page ad in the East Mountain Telegraph. Total Contacts: 6,500
- Sent Public Announcements concerning the public meetings to radio and television stations in Albuquerque. Also worked with the Public

Relations Department of the New Mexico
Department of Agriculture to get public
announcements to the media.

- Placed an ad in the East Mountain Telegraph concerning the Public Hearing Dates.
Contacts: 6,500
- Gave a copy of the Draft Water Plan to the EMW Gas Association Board of Directors at their monthly board meeting in Estancia.
- Conservation Corner article in the Estancia Valley Citizen concerning the EBWPC and the public meetings. Total Contacts: 2,500
- News Article concerning the October monthly meeting of the EBWPC, where the Draft Water Plan could be located, the dates and locations of the Public Meetings.
- 1/4 Page advertisement in the Estancia Valley Citizen announcing the Public Meeting dates and locations. Total Contacts: 2,500
- Sent 2,500 one-page flyers in the Estancia Valley Citizen.
- Placed twenty (20) Draft Water Plans in various locations throughout the Basin for public review.
- Placed eighty (80) posters in various locations throughout the Basin announcing the public meetings and giving the locations of the Draft Water Plan for review.
- Placed flyers in area businesses concerning the first round of public meetings.
- Sent 1,350 letters to Estancia Basin businesses, farmers, ranchers, and political leaders concerning the Public Meetings dates for the Draft Water Plan.
- Called 650 area businesses, farmers, ranchers, and political leaders to remind them of the public meetings.

November, 1998

- Sent flyers in the Central New Mexico Electric Coop. billings for the month of November announcing the second round of public meetings November 30 - December 3, 1998. Total Contacts: 14,000
- News article concerning public input for the Water Plan in the East Mountain Telegraph. Total Contacts: 6,500
- News article concerning the November meeting of the EBWPC and announcing the second round of public meetings November 30 - December 3, 1998. Total Contacts: 2,500
- Conservation Corner article concerning water issues and the public meetings for the second round of public meetings November 30 - December 3, 1998.
- All participants in the first round of public meetings received meeting summaries of the meetings.

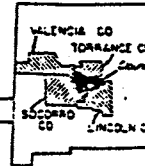
December, 1998

- Article concerning the Water Plan in the East Mountain Telegraph. Total contacts: 6,500
- Article concerning the Estancia Water Basin in the Estancia Valley Citizen. Total contacts: 2,500

This newsletter was mailed out to 1,350 individuals and businesses



Claunch-Pinto Soil and Water Conservation District



JUNE, '98

DISTRICT SUPERVISORS

Kay Lindsey, Chairperson
Frank Luna Jr., Vice Chairman
Lynn Chilton, Secretary-Treasurer
Roy V. Cain, Member
John Brian Greene, Member
E.R. (Bud) Bagley, Member
J.W. Anglin, Member

NRCS STAFF

Richard G. Spencer, DC
Dean Pritchett, Soil Con.

DISTRICT STAFF

Dierdre Tarr, Admin. Ass't.

EARTH TEAM VOLUNTEERS

Nancy Roux
Ted and Mary Jones
Lucille Flemins
Judy Chilton
Wanda Giovengo
Gayle Jones
Cari Hertel

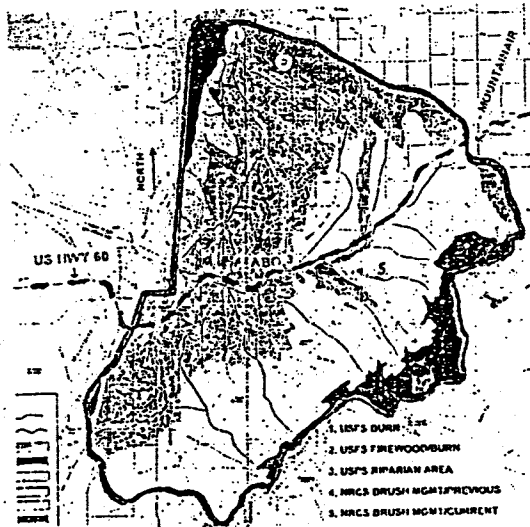
ANNOUNCEMENT - PUBLIC NOTICE

Public Hearings on Phase II of the Water Plan being completed by the Estancia Basin Water Planning Committee will be held during the 1st week in August in Moriarty, Tajique, Edgewood, and Estancia. For more information, please contact Richard Spencer, Chairman at 505-847-2941.

ABO ARROYO WATERSHED GPA

The Abo Arroyo Watershed was designated a Geographic Priority Area (GPA) in 1997. The area received \$48,060.03 in cost/share funding in 1997 for conservation work. This work is in progress at this time. A \$15,000 grant from the State Energy, Minerals, and Natural Resources Department was received in 1997. This grant was used to clear 455 acres of brush and construct small earthen diversions on the watershed. A \$25,000 grant has been approved by the EPA. As soon as all the paper work has been completed on this grant, this money will be used for more conservation work in the GPA. In 1998, the GPA was approved for \$161,000 in EQIP funding. Recently six (6) cost/share contracts were approved for this area totaling \$125,953.09. We had to turn back a total of \$35,046.91 because of a lack of desire by owners of small tracts to commit their time, energy, and money to implementing a conservation plan. The main problem was land owners lack of commitment to a long range grazing management program. Conservation practice installation not coupled with grazing management will not meet the objectives of the program.

ABO ARROYO WATERSHED
COOPERATIVE RESOURCE MANAGEMENT PROJECT



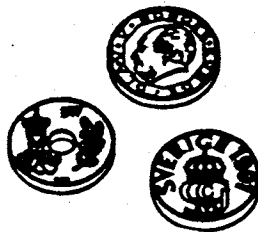
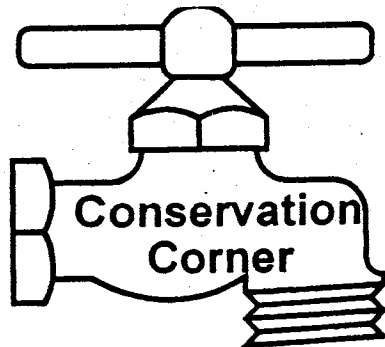
TOUR SPONSOR: CLAUNCH/PINTO SWCD
P.O. BOX 129
MOUNTAINAIR, N. M. 87036

A proposal is being prepared at this time for the 1999 EQIP program for this GPA. When the GPA is approved for more funding, we will be notifying the area residents.

conservation
"corner" article
Estancia Valley
Citizen

Total Contacts:
2,500

The Citizen -- June 26, 1998 -- Page 4



By Nancy Roux

Many may not know what is available to the public in the way of local organizations dealing with conservation. The public needs to be aware of what the Soil and Water Conservation Districts (SWCDs) are and what they can do for us.

There are 47 SWCDs in New Mexico responsible under state law for directing soil and water conservation programs within each district. Each SWCD is governed by a board of elected supervisors, and the monthly meetings are open to the public. The Claunch-Pinto SWCD in Mountainair meets the first Tuesday of each month at the Ancient Cities Café at 6 PM.

The districts plan, coordinate and implement conservation programs, practices and demonstrations. They set priorities for conservation work to be accomplished in the district. The offices serve the community with expertise on soil, water, air, plants and animal resource projects. SWCDs assist local governments in other activities such as subdivi review, recreational park planning and regional water planning. Also available through the districts are informational materials and equipment to encourage natural resource conservation.

The Claunch-Pinto SWCD was issued a certificate of organization

from the State of New Mexico in 1941. The goal of the district is to promote use of conservation practices and resource management methods to reduce wind and water erosion. Conservation practices may include brush control, erosion control structures, fences or water development. Resource management techniques may include planned grazing systems and/or proper grazing use.

Conservation awareness encompasses many areas. An immediate issue of concern is water - be it private use, agricultural, recreational, commercial or other public uses. In 1995 the Estancia Basin Water Planning Committee was created to address water planning efforts for the Estancia Underground Water Basin. This water basin falls within the jurisdictional boundaries of three counties: Bernalillo, Santa Fe and Torrance. Regional planning is taking place with representatives from all three local SWCDs leading the effort.

The committee performs an advisory role to various governments concerning the water resources of the basin. The major responsibilities of the committee include the promotion of water resource planning activities affecting the basin, developing a regional water plan, review and comment on major development proposals impacting water resources of the basin, investigating and recommending water resource management policies and strategies within the basin and promoting public education programs regarding conservation, preservation and protection of the water resources of the basin. Water board meetings are held the second Monday of every month at the Torrance County Courthouse in Estancia. They are open to the public. Conservation takes public awareness and participation.

Please feel welcome to come to the public meetings and begin to take an active role in participating in the future of conserving our resources which is the future of our area.

The Citizen -- July 24, 1998

Water Meetings Being Planned

By Debbie Terry

Members of the Estancia Basin Water Planning Committee held their monthly meeting on Monday, July 13th at the Torrance County Courthouse. Items discussed included the status of Phase ii of the Estancia Basin Water Plan and the ensuing public meetings which will be held through out the basin following completion of the second phase.

Currently, Jim Corbin of Corbin Consulting, Inc., is in the process of finalizing the draft of to the committee for review at the August meeting. Mr. Corbin has been working with a steering committee

Continued on Page 4

More Water Meetings

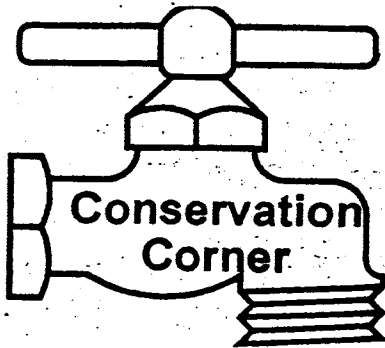
From Page 1

made up of EBWPC members during the past few months and with their input has developed Phase II of the plan which, in part, pursues a more sustainable water use within the basin.

Following acceptance of Phase II by the EBWPC, a series of public meetings include sometime during the months of October and November. The EBWPC is in the process of securing a professional mediator to conduct these public meetings.

The EBWPC meets the second Monday of the month at 9 AM at the Torrance.

The Citizen - July 31, 1998 - Section A, Page 4



By Nancy Roux

Facts:

...the per capita daily water use in the US is about 1,400 gallons (all uses, including irrigating, mining, manufacturing, as well as, domestic uses). Per capita daily water use in other countries range from five gallons in Haiti, to well over 3,000 gallons in Iraq, with a worldwide average of 475 gallons.

...of all the earth's water, 97% is salt water located in oceans and seas. 1% of the earth's water is available for drinking.

...one American in six draws

his/her drinking water from private wells and springs. Many of these private water sources are not tested for water quality.

...Soil quality is a key determinant of water quality. Soils regulate and partition water flow and buffer against human use and environmental changes.

Good quality water reflects what we do on the land as well as what we do in the water. Since agriculture is by far the most extensive land use in the US, improved water quality depends on the commitment of farmers and ranchers to improve the quality of soil, as well as water.

However, work can be done in your own backyard, making your own commitment to saving the soil from erosion and taking steps to improve the quality of the soil. Start by walking around your property (be it small or several acres). Observe and begin to recognize areas that are prone to erosion. For example, areas where no plants are growing along property lines, walkways and drives, and sloped areas where gullies are forming from water runoff on exposed soils around houses and downspouts. Mud in street gutters or on sidewalks indicates soil is eroding from surrounding areas.

Once you've identified trouble

areas, begin to work on the exposed areas by seeding with native grasses or plant ground cover. Mulch (straw or compost) over these areas to keep it moist and the seeds in place. Terrace steep slopes and add mulch. If you terrace on the contour of the land, water will percolate into the soil rather than wash and erode down drainages.

With downspouts from the roof, catch the water in rain barrels, to use for future watering. Plant windbreaks of trees or shrubs to reduce wind erosion.

If you start in your own backyard, you can make a difference and expand to your neighbors - teach them, help them, create solutions between houses. Start by observing your place and you will begin to see more areas where you can help to improve soil and water in your community.

Public participation meetings will be changed to the first week in October. Dates will be published in the paper for the first set of meetings to be held in Estancia, Tajique, Edgewood and Moriarty.

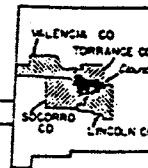
There is still a limited amount of money available for plugging abandoned wells. If interest, please contact Richard Spencer, District Conservationist at 847-2941.

This brochure was mailed out in utility bills, newsletters. Handed out at area meetings attended by members of the Estancia Basin Water Planning Committee.

This newsletter was mailed out to 1,350 individuals and businesses



Claunch-Pinto Soil and Water Conservation District



SEPT., '98

DISTRICT SUPERVISORS

Kay, Lindsey, Chairperson
Frank Luna, Jr., Vice-Chairman
Lynn Chilton, Secretary-Treasurer
Roy V. Cain, Member
John Brian Greene, Member
E.R. (Bud) Bagley, Member
J. W. Anglin, Member

NRCS STAFF

Richard G. Spencer, DC
Dean Pritchett, Soil Con.

DISTRICT STAFF

Dierdre Tarr, Admin. Ass't.

EARTH TEAM VOLUNTEERS

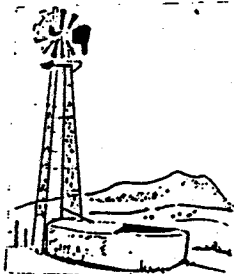
Nancy Roux
Ted and Mary Jones
Lucille Flemins
Judy Chilton
Wanda Giovengo
Gayle Jones
Carl Hertel
Deann Luna

IMPORTANT.....MARK YOUR CALENDERS!!!!!!

The dates for the Public Hearings on Phase II of the Regional Water Plan prepared by the Estancia Basin Water Planning Committee are:

Tajique, 10/26/98, 7-10 p.m. - Tajique Community Center
Edgewood, 10/27/98, 7-10 p.m. - Edgewood Elementary School
Estancia, 10/28/98, 7-10 p.m. - Torrance County Courthouse
Moriarty, 10/29/98, 7-10 p.m. - Moriarty Community Center

Please attend, become aware of our water resource need, and join the action phase of implementing the locally developed Estancia Basin Water Plan. For further information, please call Richard Spencer at 505-847-2941.



"When the well's dry, we know the worth of water."
-Benjamin Franklin, (1706-1790), Poor Richard's Almanac, 1746

UPDATE - ABO ARROYO WATERSHED PROJECT
by: Dierdre Tarr

Improving the environmental quality of our District through Watershed Planning to reduce erosion problems in the Abo Arroyo Watershed has become a major project for the SWCD. The following has been completed:

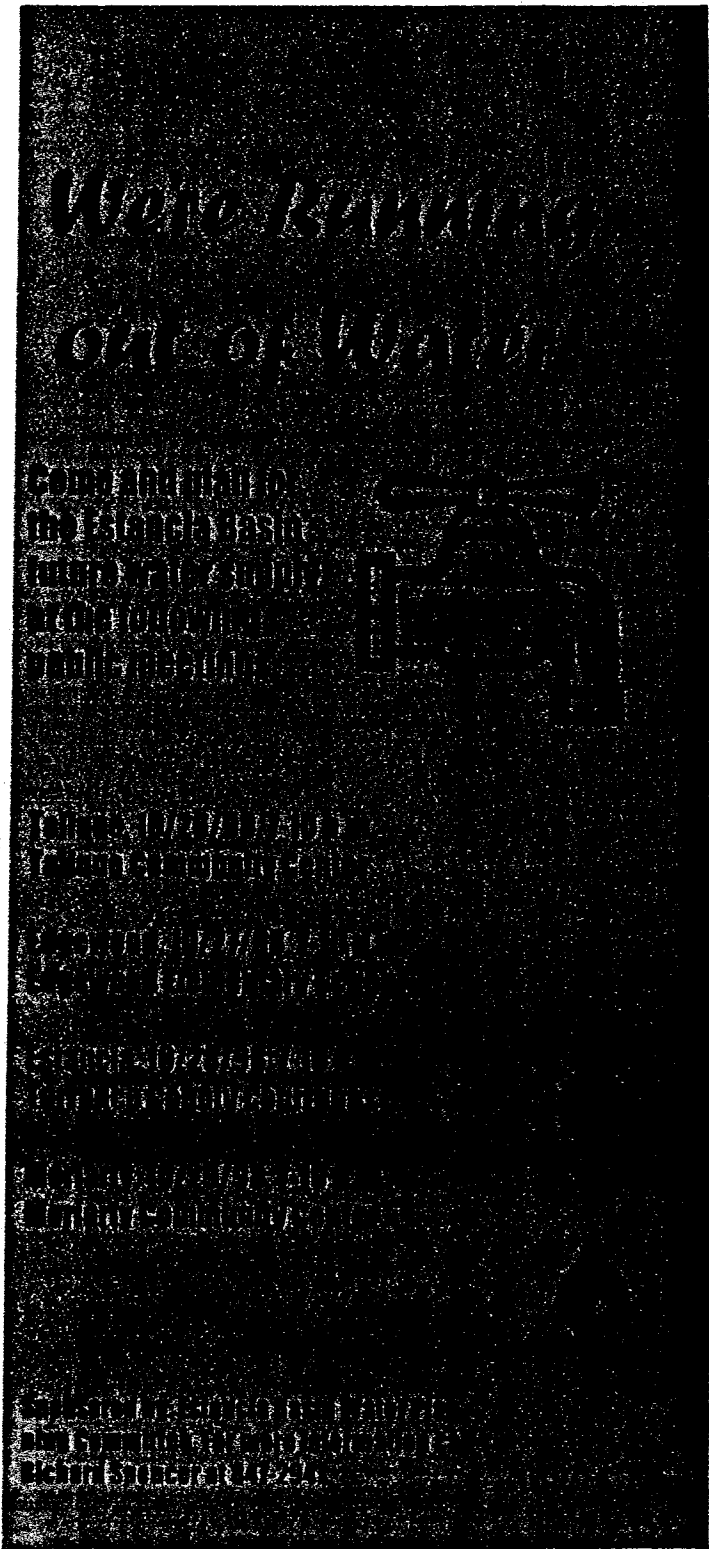
- \$15,000 was received from the Energy Minerals & Natural Resources Department. These funds were used for Brush Management and Diversions. This project was completed in late August, 1997.

- \$25,000 in funding has been approved by the NM Environmental Dept. The JPA's have been signed and the District is currently waiting for the okay to proceed with the Brush Management and Diversion projects in the Watershed.

- Six (6) contracts were approved in FY 98 for a total of 12,088 acres and \$125,953.09. The District has a total of eleven (11) active contracts in the Watershed for a total of 46,028 acres and \$174,013.

- The US Forest Service is working on Brush Management and Diversions on the upper portion of the Watershed. They have collected data for an erosion study on the Watershed and will be working on salt cedar control in riparian areas.

- The US Park Service is working on salt cedar control in a riparian area at the Abo Unit.



These flyers were in the October billing for Central New Mexico Electric Coop., Inc. These flyers were placed in the following businesses:

Total Billings CNME, Coop. 14,000

Moriarty City Hall, Moriarty Library, Entranosa Water and Waste Coop., Mountain Valley Jewelers, Valley Farm and Ranch, John Brooks Grocery Store, Moriarty Foods, Mike's Friendly Store, Central NM Electric Coop. - Moriarty, Central NM Electric Coop. - Mountainair, Mountainair City Hall, Mountainair Library, Estancia Library, Mountainair Grocery, Estancia Library, Estancia City Hall, Sturges Market, and many other businesses in Edgewood, Moriarty, Estancia, Willard, Mountainair, Punta, Manzano, Torreon, Tajique, and Chilili.

Water Planning Committee Meets

By Debbie Terry

Monday, September 21st, members of the Estancia Basin Water Planning Committee (EBWPC) held their monthly meeting. Due to scheduling conflicts, the committee postponed their meeting one week, and as such, apologizes for any possible inconvenience this may have caused

potential visitors to the meeting. The top priority of the meeting centered around the upcoming release of the Draft of Phase II of the Estancia Basin Water Plan to the public. For the past several months, Jim Corbin, Corbin Consulting, Inc. has worked with the committee

members in the formulation of Phase II of the basin-wide water plan. Phase II deals with developing a water plan which will sustain the quantity and preserve the quality of water throughout the Estancia basin into the future. Copies of the draft of Phase II will be available for public review in the coming weeks at the following locations: the Torrance County Courthouse, municipal halls in Estancia, Moriarty, Mountainair, Torreon and Willard; public libraries in Estancia, Moriarty, Mountainair, Torreon and Willard; Community

Continued on Page A-12

The Citizen - October 9, 1998 - Section A, Page 12

More Water Planning

From Page A-1

Centers in Chilili, Edgewood, Manzano, McIntosh, Punta de Agua, Tajique and Torreon. Anyone interested in the future quantity and quality of water throughout the Estancia Basin is urged and encouraged to review the draft of the Phase II Water Plan at one of the above locations.

Public meetings to discuss the Draft of Phase II have been scheduled for the end of October at the following locations:

1. Monday, October 26th - Tajique Community Center, 7-10 PM.
2. Tuesday, October 27th - Edgewood Elementary School, 7-10 PM.
3. Wednesday, October 28th - Estancia, Torrance County Courthouse, 7-10 PM.
4. Thursday, October 29th - Moriarty Community Center, 7-10 PM.

The public is invited and encouraged to attend these meetings. Each meeting will begin with a brief

presentation by Jim Corbin highlighting sections of the draft of Phase II. Ensuing discussion and participation by the audience will follow. Lucy Moore of Western Network will facilitate these discussions and record public comments.

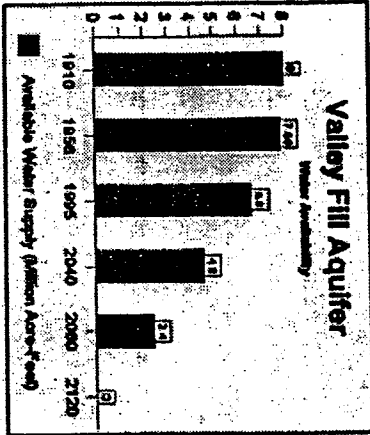
After this first series of public meetings, the EBWPC will meet in November to review public comments, and where necessary, amend Phase II. The second round of public meetings is tentatively scheduled for the middle of November.

Anyone with an interest in the future water quantity and quality throughout the Estancia Basin is invited to attend the public meetings scheduled for the end of October and the monthly meeting of the EBWPC. The EBWPC will hold its next meeting on Monday, October 19th at 9 AM at the Torrance County Courthouse. If you have any questions, please contact EBWPC Chairman, Richard Spencer at 847-2941.

WATER PLANNING FOR THE FUTURE OF THE ESTANCIA BASIN

Vision Statement:

The Estancia Basin Water Planning Committee, representing interest of Torrance, Santa Fe, and Bernalillo Counties, is dedicated to planning for the continued availability, future sustainability, increased conservation, and wise and prudent use of our valuable water resource to continue the culture and lifestyle of the basin.



Studies show that water levels are dropping in the valley fill aquifer. Coupled with the increasing demands from urbanization, future water availability to meet all needs is threatened.

NOTICE PUBLIC HEARING DATES

Come and plan for the Estancia Basin's future water supply at the following public meetings:

- Tajique, 10/25/98, 7-10 p.m.
- Talique Community Center
- Edgewood Community Center
- Edgewood, 10/27/98, 7-10 p.m.
- Estancia, 10/28/98, 7-10 p.m.
- Torrance County Courthouse
- Mohrley, 10/29/98, 7-10 p.m.
- Mohrley Community Center

Planning Committee

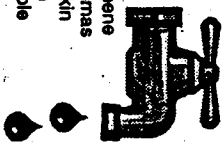
The Estancia Basin Water Planning Committee was created in 1995 to address water planning efforts for the Estancia Underground Water Basin. This was a result of the New Mexico State Legislature strongly encouraging regions to negotiate solutions to local water problems at the grass roots level. Since public welfare and conservation considerations differ, depending upon local conditions and factors, it was determined necessary that a local group come together to study and address local water needs.

This special purpose advisory planning committee represents water users (agriculture, municipalities, developers and utilities) Soil and Water Conservation Districts, county governments and citizens at large. They work together to provide processes to protect the quality and quantity of water resources of the Estancia Basin for future generations. The Estancia Basin Water Planning Committee includes thirteen voting members, each of which represents a specific category of water resource interests.

The Estancia Basin includes portions of land within the boundaries of three counties: eastern Bernalillo, southern Santa Fe and the majority of Torrance County. Memorandum of Understanding with the County Commissions was established to formally support the coordinated water planning efforts in August, 1995.

Estancia Basin Water Planning Committee:

- Richard Spencer, Chairman
- Mike Schwabach, Vice Chairman
- Charles Hodgin, Secretary
- Jeffery Peterson
- Lewis Fisher
- Sam King, Jr.
- Rita Horton
- Bud Hageman
- Brian Greene
- Gary Thomas
- Robert Akin
- Bill Neish
- Gary Maple



For more information or comments, call 505-947-2941 or write to PO Box 129, Mountair, NM. Regular monthly meetings are held the second Monday of every month at the Torrance County Courthouse in Estancia beginning at 9:00 am.

PROGRESS TO DATE

December 1993-First meeting of the Committee is held to begin developing the Estancia Basin Water Plan.

Mid 1995-Public meetings were held at various locations throughout the basin to help identify the water resource issues.

August 1995-Bernalillo, Santa Fe and Torrance County Commissions formally adopt the Memorandum of Understanding for coordinated water resource planning in the Estancia Basin.

September 1996-A team of consultants provided professional services for the Regional Water Plan for the Estancia Underground Water Basin. The report serves as the data base for all water planning efforts in the basin.

October 1996-Another series of public meetings was held to identify the public's concerns regarding public welfare and conservation methods.

January 1997-Committee is given the responsibility to review and comment on major development proposals that could potentially impact local water resources.

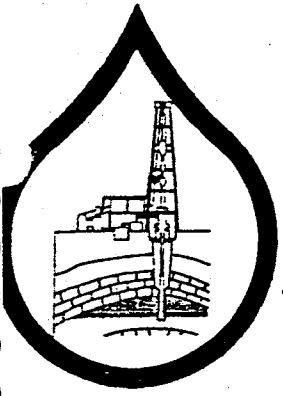
April 1997-Committee begins to address emergency contingency plans, water conservation and water plan alternatives. Water conservation component includes education, legislation, agricultural conservation, watershed health terrain management and community water and development review.

May 1997-Committee supports the Abandoned Well Plugging Program, Sponsored by local Soil & Water Conservation Districts to protect groundwater quality.

December 1997-Committee prepares a resolution for review and approval by the Tri-County Commissioners which concerns new water rights applications and the transfer of water and water rights out of the Estancia Basin.

January 1998 to Present-Continue work on Phase II of the regional water plan, including summary of future projected water use changes, management alternatives and economics and an implementation plan and schedule.

Present-Public meetings are being scheduled for review and comments on Phase II of the regional water plan.



Estancia Basin Water Planning Committee

Box 168 Estancia, New Mexico 87016

October 15, 1998

Letters were sent to 1,350
Estancia Basin businesses,
ranchers, farmers, and political
leaders

The Estancia Basin Water Planning Committee (EBWPC) is in the final stages of completing Phase II of the Water Plan for the Estancia Basin. The committee has been working with Corbin Consulting, Inc. since January, 1998, on Phase II which will include a summary of future predicated water use changes, management alternatives, and economics. An implementation plan and schedule is also included in Phase II.

You are cordially invited to participate in the public meetings scheduled for review of the Draft Water Plan. Participation is encouraged to get continued grass roots public comment into the Final Plan before it is presented to the Interstate Streams Commission. The Public Meeting schedule is as follows:

Tajique	- 10/26/98	- 7-10 pm	- Tajique Community Center
Edgewood	- 10/27/98	- 7-10 pm	- Edgewood Elementary School
Estancia	- 10/28/98	- 7-10 pm	- Torrance County Courthouse
Moriarty	- 10/29/98	- 7-10 pm	- Moriarty Community Center

Following these meetings, the consultant and the EBWPC will consider issues raised by you. If substantial scientific evidence or defensible data is presented, the Draft Plan will be revised. A second series of meetings in early December will give you a chance to see the Final Plan that will be submitted to the Interstate Streams Commission.

A copy of the Draft Plan is available for review or copying in several locations throughout the Estancia Water Basin. For information on the location in your area or for other ways you can participate in this process, please call Richard Spencer or Dierdre Tarr at 505-847-2941.

The Estancia Basin Water Planning Committee is looking forward to your attendance at the Public Hearings.

Yours truly,

Richard G. Spencer / by dlt.
Richard G. Spencer

RGS:dlt

Torrance County

Santa Fe County

Bernalillo County

"Coordinated water resource planning for the Estancia Underground Water Basin."



Estancia Basin Water Planning Committee

Box 168 Estancia, New Mexico 87016

PUBLIC SERVICE ANNOUNCEMENT

The Estancia Basin Water Planning Committee is inviting the public to participate in public meetings scheduled for review of the Estancia Basin Draft Water Plan. Participation is encouraged to get continued grass roots public comment into the Final Plan before it is presented to the Interstate Streams Commission. The Public Meeting Schedule is as follows:

Tajique - 10/26/98 - 7:00 pm - Tajique Community Center
Edgewood - 10/27/98 - 7:00 pm - Edgewood Elementary School
Estancia - 10/28/98 - 7:00 pm - Torrance County Courthouse
Moriarty - 10/29/98 - 7:00 pm - Moriarty Community Center

The Estancia Water Basin includes Torrance County, Eastern Bernalillo County, and Southern Santa Fe County.

For more information call Richard Spencer, Chairman, Estancia Basin Water Planning Committee at 505-847-2941.

This Public Service Announcement was sent to the following:

Citidel Communications - News
Barbara Ferry at the New Mexican
Citidel Communications - Public Service Announcements
KOB-TV - News
KOAT-TV - News Department
KOAT-TV - Joe Diaz
Lana Dickson - New Mexico Department of Agriculture, Public Relations

Torrance County

Santa Fe County

Bernalillo County

"Coordinated water resource planning for the Estancia Underground Water Basin."

PUBLIC MEETINGS TO REVIEW DRAFT WATER PLAN FOR THE ESTANCIA WATER BASIN

Tajique Community Center	10/23/91	7:00-10:00
Edgewood Elementary School	10/27/91	7:00-10:00
Torrance County Courthouse (Estancia)	10/30/91	7:00-10:00
Moriarty Community Center	10/31/91	7:00-10:00

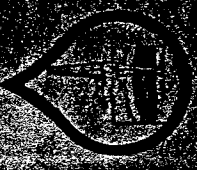
PARTICIPATE NOW

You can review or copy the Draft Water Plan in the following office:

- Mountain View City Hall
- Claunch-Pinto SWCD Office - Mountain View
- Estancia City Hall
- EMW Gas - Estancia
- Moriarty City Hall
- Moriarty Library
- Manzano Assoc. - See Delfin Romero, Pablo Romero, Cecilio Guzman
- Tajique - Joe Barnes
- East Torrance SWCD Office - Estancia

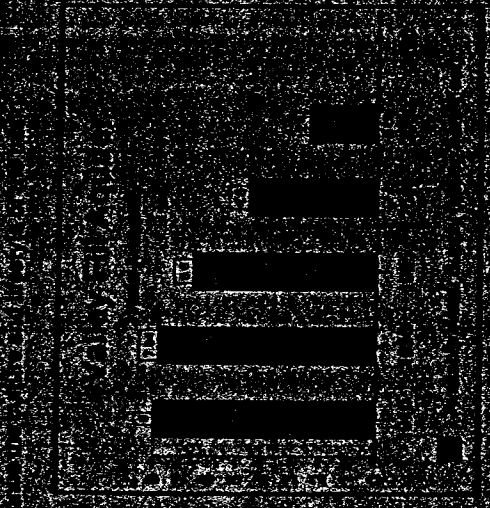
- Entrance to Water Canyon
- Edgewood Office
- GNM Estancia - Pablo Romero
- GNM Estancia - Cecilio Guzman
- Torrance Community Center - Estancia
- Chille - Estancia - Guzman
- Punta - See Macaris Romero
- Frank Hill
- Edgewood SWCD Office - Moriarty

Estancia Basin



Vision Statement

The Estancia Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.



The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

The Basin Water Planning Commission is committed to providing a safe, reliable, and sustainable water supply for the future of the Estancia Basin.

**CORRECTION OF
MEETING LOCATION:**

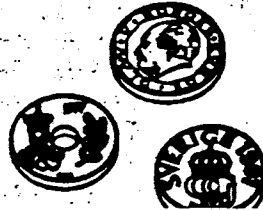
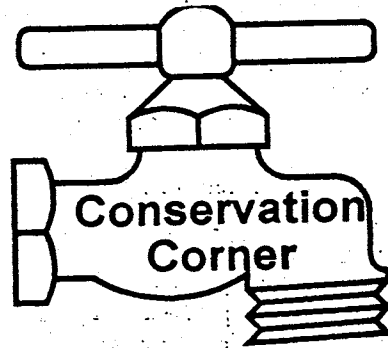
NOTICE

PUBLIC HEARING DATES

Come and plan for the Estancia
Basin's future water supply at the
following public meetings:

- Tajique, 10/26/98, 7-10 p.m.
Tajique Community Center**
- Edgewood 10/27/98, 7-10 p.m.
Edgewood Elementary School**
- Estancia 10/28/98, 7-10 p.m.
Torrance County Courthouse**
- Moriarty 10/29/98, 7-10 p.m.
Moriarty Community Center**

The Citizen - October 23, 1998 -



by Mike Schwebach
 East Torrance SWCD Supervisor &
 Estancia Basin Water Planning
 Committee Member

Five years ago, a committee was formed to look at and address the ever increasing concern of water availability and usage within the Estancia Basin. This committee consists of agricultural representatives, Soil and Water Conservation District members, county appointed representatives, a municipal developer, utilities, and a citizen-at-large. These representatives are from Torrance, Bernalillo, and Santa Fe counties - all of which are a part of the Basin.

At the time the committee was formed, the Estancia Basin was included with the Rio Grande Basin. The committee realized the need to be recognized as a separate basin, with people from the Estancia Basin planning for their own needs and addressing their own concerns.

As a result, the Estancia Basin Water Planning Committee is now recognized by the Interstate Stream Commission and the State Engineer.

They were awarded funding from the Interstate Stream Commission for the purpose of compiling a report of hydrology data for the area, which was completed, September 1996.

The second phase of the plan, of trying to balance the demands and availability of the resource, is now being examined. Upon entering this phase, the committee will be conducting public meetings in different communities throughout the area from October 26th through October 29th, in order to hear specific public concerns. These concerns will determine the direction taken by the committee on the plan, keeping in mind the focus on conservation and water development.

The State Engineer deems public input to be an ever important part of the decisions made concerning the water use in the Basin, as does the committee. If you are concerned with the future of the water use within the Basin, please attend These meetings and voice your concern.

The Citizen - October 23, 1998 - Section B, Page 2

EBWPC Completes Phase I

By Debbie Terry

The Estancia Basin Water Planning Committee (EBWPC) held its monthly meeting on Monday, October 21st at the Torrance County Courthouse. Members discussed the upcoming public hearings to be held throughout the basin beginning next week. The public meetings give basin residents a chance to comment on Phase II of the water plan for the Estancia Basin. Phase II, developed by Jim Corbin of Corbin Consulting, Inc., includes summaries of future predicted water use changes, management alternatives and economics, and an implementation plan and schedule for several different water management scenarios. Copies of Phase II can be read at several basin locations including: Estancia City Hall, EMW Gas in Estancia, East Torrance SWCD Office in Estancia, Moriarty City Hall, Moriarty Public Library, CNM Electric Coop. in Moriarty and Mountainair, Edgewood SWCD office in Moriarty, Edgewood Public Library, Entranosa Water Coop., Chilili Community Center, Tajique Community Center, Torreon Community Center/Library, Manzano Community Center, Punta de Agua Community Center, Mountainair City Hall, Mountainair Public Library, Claunch-Pinto SWCD Office in Mountainair, and Willard City Hall. Copies can be bought for ten dollars at the East Torrance SWCD Office in Estancia and at the Claunch-Pinto Office in Mountainair.

Public meetings offered throughout the Estancia basin begin the week of October 26th and offer basin residents a chance to comment on Phase II. The schedule of meetings is as follows:

Tajique Community Center:
10/26/98, 7-10 pm.

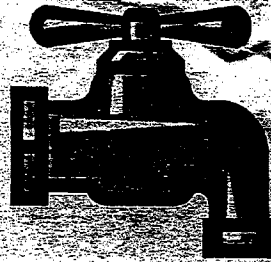
Edgewood Elementary School:
10/27/98, 7-10 p.m.
Torrance County Courthouse,
Estancia: 10/28/98, 7-10 p.m.
Moriarty Community Center:
10/29/98, 7-10 p.m.

Written comments can be sent to the EBWPC at P.O. Box 129, Mountainair, NM. Come and be involved in planning for the future sustain ability of water throughout the Estancia Basin.

The EBWPC is dedicated to planning and developing a comprehensive water plan for the Estancia Basin. Recognizing the need to protect the state's water resources, the Interstate Stream Commission developed specific regions throughout the state and directed each region in the development of a water plan specific to the needs and wants of the region's residents. The 13-member EBWPC, who represent water users in the tri-county area, (Torrance, Bernalillo, and Santa Fe), have worked diligently to develop processes which work to protect the future quality and quantity of the water resources of the Estancia Basin. Following the Interstate Stream Commission's regional water planning template, the EBWPC has completed Phase I and is in the process of hearing public comments on Phase II. Currently, the EBWPC has completed more work on developing the region's water plan than any other water region in the state. Residents of the Estancia Basin are welcome to attend monthly meetings of the EBWPC at the Torrance County Courthouse on the second Monday of each month at 9 am. The next meeting will be held November 9th. The EBWPC looks forward to hearing from residents of the Estancia Basin at next week's public hearings.

We're Running out of Water!

**Come and review
the Estancia Basin
Water Plan at the
following public
meetings:**



**Tajique, 11/30/98, 7-10 p.m.
Tajique Community Center**

**Edgewood, 12/01/98, 7-10 p.m.
Edgewood Elementary School**

**Estancia, 12/02/98, 7-10 p.m.
Torrance County Courthouse**

**Moriarty, 12/03/98, 7-10 p.m.
Moriarty High School**

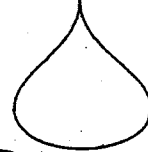
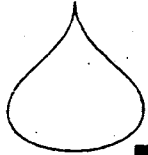


**Sponsored by: Estancia Basin Water Plan-
ning Committee. For more information call
Richard Spencer at 847-2941.**

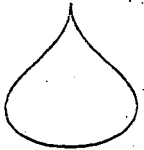
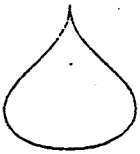
These flyers were in the November billing for Central New Mexico Electric Coop., Inc. These flyers were placed in the following businesses.

Total Billings CNME, Coop. 14,000

The Citizen -- October 23, 1998



**PUBLIC MEETINGS
TO REVIEW
DRAFT WATER PLAN
FOR THE
ESTANCIA WATER BASIN**



Tajique Community Center	10/26/98	7 - 10 pm
Edgewood Elementary School	10/27/98	7 - 10 pm
Torrance County Courthouse, Estancia	10/28/98	7 - 10 pm
Moriarty Community Center	10/29/98	7 - 10 pm

PARTICIPATE NOW ! ! !

This ad was paid for by the East Torrance Soil and Water Conservation District.



Public input desired on water plan for Estancia Basin

By Georgia Overlander

The Estancia Basin Water Planning Committee held meetings in four locations last week to review their draft water plan for the Estancia Basin. The plan includes water management, conservation, water development and water quality programs to be implemented over the next 40 years. Richard Spencer, chairman of the committee, said their vision is to represent the interest of Torrance, Santa Fe and Bernalillo counties in planning for the continued availability of water to continue the culture and lifestyle of the basin's residents. They are planning for the future sustainability, increased conservation, and wise and prudent use of the resource. The committee was formed

five years ago because of residents' concerns about declining water levels and their perception that water quality was deteriorating in the Estancia Basin. Its first job was to gather information on the basin's water use over the past years and project future water use. They determined water levels in the basin are depleting by about 45,000 acre feet a year. The report states, "Based on the projections and past and current usage data, about 120 years of water supply appears to remain in the Valley Fill aquifer, the basin's major source of water. The amount of water in storage in other aquifers has not been determined with any real accuracy."

Deterioration of water quality is appearing in some of the more heavily developed areas.

The report warns that if nothing is done, water quality will deteriorate to the point where residents will have to replace appliances such as dishwashers and water heaters more often. Water will have to be treated to bring it to an acceptable level for human consumption.

Jim Corbin, a engineer and consultant hired by the committee, explained the need for a water plan, saying, "If you let the state or federal government dictate to you, you will get a solution, but one you don't like." He said that south of Elephant Butte Reservoir, Texas has control of New Mexico water. Also, Colorado, Utah and Arizona are well ahead of New Mexico in identifying water supplies and planning for future use. He said that water plans "end up a middle-of-the-road

thing. No one is completely satisfied." He said we are not in a disaster situation yet, that we still have time to work on water planning.

The New Mexico Interstate Stream Commission is the lead agency for regional planning with guidance and funding provided by the state Legislature. Corbin said, "If you're first in the door, you're in great shape. If we put in a plan acceptable to them, we have a chance of getting money to do something."

Corbin said the State Engineer Office manages the Estancia Basin's water with the idea that "it is a mined basin" and grants block allocations of water. On the other hand, the New Mexico Interstate Stream Commission requires water planning toward the goal of a sustainable water supply, meaning that no more

water is used than is refilled into the aquifer.

According to the present system, in order to keep water rights owners are required to use all the water allotted to them or at least report that they are doing so. Corbin said conservation efforts are set up for defeat unless we change the system. Our local governments have to impress on the state Legislature the need for change, he said.

One of the "absolute-must priorities" listed in the executive summary is for establishment of Water Rights Incentive Rebate and Banking Programs that reward taking water rights out of production and not using existing recognized unused water rights. The validity and amount of water rights owned

Continued on page 11

Public input desired on water plan for Estancia Basin

Continued from page 10

by each person or entity in the basin must still be protected.

The report states that a single-focus water authority must be established with necessary funding and a long-term approach to execute the programs year after year. It further states that the Estancia Basin needs to be designated a Special Groundwater Management Area by counties and the state to ensure focus, funding and coordinated efforts.

Setting up the mechanisms for future funding are of great importance since start-up costs are \$25,000 for programs which are anticipated to start Jan. 1, 2000. Yearly costs averaged over the 40 years of the plan are \$2,175,000.

In addition to funding from state and federal government,

other sources might include obtaining federal tax credits for water banking, increasing gross receipts tax, charging for permits to drill wells, adding surcharges on water exported from the Estancia Basin, and having a tax or surcharge on water usage above a certain budgeted level.

The report says it is critical that the amount of water pumped must be minimized, and water which is pumped from the aquifers must be used with maximum efficiency and reused again and again when possible. Installing meters on wells is one means of monitoring water use. In public meetings two years ago, the No. 1 public concern was the exportation of water from the Estancia Basin.

Programs will have to be initiated to find out what water is available, what is really being used, how the aquifers interact

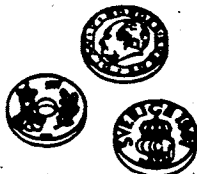
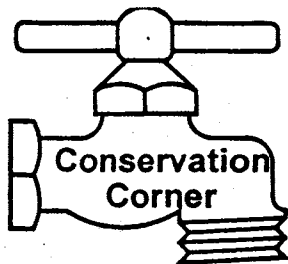
and how recharge of the aquifers works. These programs will also function as an "early warning system" for contamination.

The Estancia Basin Water Planning Committee does not believe the basin can be brought to a sustainable, self-sufficient resource posture in the next 40-year period, but says the Water Plan is based on actions which have worked elsewhere to reduce the aquifer depletion and which appear prudent. They hope the water plan will extend the life of the Estancia Basin from the presently projected 120 years to 260 years.

Copies of the water plan are available for study at public libraries, municipal offices and soil and water conservation offices in the area. Individuals may comment on the plan until Nov. 13 by calling Richard Spencer at 847-2941 or Lucy Moore at 820-2166 or writing to P.O. Box 129, Mountainair, NM 87036.

"Conservation Corner"
Article - Estancia
Valley Citizen

Total Contacts:
2,500



by: Carl Hertel

The Estancia Basin Water Planning Committee is just completing its Phase II public hearings for preparation of their Regional Water Plan and have made good progress in developing a broadly based, fair and reasonable water plan. The water plan takes into consideration the fact that our area is currently in transition from a lightly populated, primarily agricultural use region to an area with increasing population, wide diversity of land use and pronounced pressures on water resources.

In her fall issue of Water Dialogue, Lisa Robert has outlined the tremendous importance and the great difficulties involved in regional water planning throughout the state of New Mexico. In the issue she outlines the basic parameters for evolving a Water Conservation Plan as laid out in the Bureau of Reclamation's "Achieving Efficient Water Management" Guidebook. Incidentally, you can get a copy of this valuable booklet by calling 505-248-5320. Robert notes that the Bureau of Reclamation has nearly a century of experience in water planning and has undertaken major water initiatives throughout the west over the last century. What a region needs to do, Robert says is "...gather needed information, determine a fitting goal or goals, evaluate possible alternatives, select a course of action, and somehow carry it through, ideally with the help of a public involvement process that invites both comment and review from all potentially affected parties." None of this is easy, but she says it is absolutely essential to successful planning.

According to Robert, a water efficient district looks something like this. "It employs measurement and accounting systems capable of tracking water delivered to individual users; its pricing is at least partially based on the quantity of water delivered; its customers have ready access to information about efficient water use, and to programs and

services that will help them achieve it; there is a water conservation coordinator to develop educational programs and disseminate information on irrigation techniques, and soil and crop requirements; there are sound contingency plans for times of water shortage, and incentives for on-farm or at-home water conservation; all irrigation is scheduled and all facets of the distribution system can be controlled in response to changing conditions; there are methods for capturing and reusing drainage, ways to optimize available water through conjunctive use, and the means to effect mutually beneficial water transfers between areas of surplus and areas of scarcity." This is a large order for the sixteen regions developing water plans throughout New Mexico. They are currently struggling with these and other problems - and having varying degrees of success in solving them.

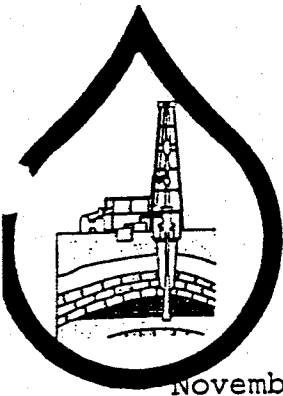
Robert emphasizes the importance of voluntary water conservation and the vital role to be played by education in the facing New Mexico's water crisis over the next decade of development in outlying areas - not to mention in our cities. No less important is the role to be played by every citizen in helping to make the tough decisions required in coming up with a water conservation plan. The Estancia Basin Water Planning Committee has made an excellent start in this lengthy process which began in some regions as early as 1987. The state legislature is currently forcing the sixteen regional planning committees to complete their deliberations over the next two years! Therefore, citizens and out appointed and elected officials must work hard and with good faith to achieve balanced and fair regional plans based on water resource realities, local options and reasonable predictions for future growth and resource depletion.

UPDATE ON THE PUBLIC WATERBOARD MEETINGS:

The second round Public Participation meetings for Water Planning for the Future of the Estancia Basin will be held in the following locations:

- Tajique, 11/30/98, 7-10 p.m.
Tajique Community Center
- Edgewood, 12/01/98, 7-10 p.m.
Edgewood Elementary School
- Estancia, 12/02/98, 7-10 p.m.
Torrance County Courthouse
- Moriarty, 12/03/98, 7-10 p.m.
Moriarty High School

PLEASE PLAN TO ATTEND ONE OF THESE MEETINGS.



Estancia Basin Water Planning Committee

Box 168 Estancia, New Mexico 87016

NOTE:

Letters were sent out to the people who attended the first round of Public Meetings.

November 16, 1998

I appreciate your concern and commitment to work towards maintaining a sustainable water supply in the Estancia Basin for future generations.

Enclosed for your information and review is a summary of the comments received at the Estancia Basin Regional Water Planning public participation meetings held October 26th through 29th in Tajique, Edgewood, Estancia, and Moriarty.

These comments will be addressed in the final plan that will be presented at the next set of public meetings. The meetings will be held as follows:

Tajique - 11/30/98 - 7-10 pm
Tajique Community Center

Edgewood - 12/01/98 - 7-10 pm
Edgewood Elementary School

Estancia - 12/02/98 - 7-10 pm
Torrance County Courthouse

Moriarty - 12/03/98 - 7-10 pm
Moriarty High School

The Estancia Basin Water Planning Committee is looking forward to your attendance at these meetings. Please take note that the Moriarty meeting has been moved from Moriarty Community Center to Moriarty High School.

Sincerely,

Richard G. Spencer
Chairman
Estancia Basin Water Planning Committee

RGS:dlt
Enclosures

Torrance County

Santa Fe County

Bernalillo County

"Coordinated water resource planning for the Estancia Underground Water Basin."

The Citizen -- November 27, 1998

Water Board Sets Final Basin Meetings

By: Debbie Terry

The Estancia Basin Water Planning Committee (EBWPC) held its meeting on Thursday, November 19th at the Torrance County Courthouse. The committee met in an all day session to discuss the public meetings held throughout the Estancia Basin at the end of October. Reviewing and answering public comments on the Estancia Basin Draft Water Plan was among the top priority of the EBWPC during Thursday's meeting. Four public meetings held throughout the Estancia Basin during the end of October gave basin residents the opportunity to comment, ask questions, and raise their concerns on the Draft Water Plan prepared for the EBWPC by Jim Corbin, Corbin Consulting, Inc. Many positive comments were received and the meetings were well attended, very constructive, and highly productive. A review and summary of each of the four meetings prepared by Lucy

Moore, a professional facilitator hired by the EBWPC, was mailed to the residents who attended these meetings. Some of the concerns raised by basin residents included issues about the aquifers underlying the basin, such as supply, drawdown, and recharge to the aquifers; the present and future role agriculture plays in the use of water throughout the basin, the conflicting water management policies of the State Engineer's Office and the Interstate Stream Commission, i.e. mining the aquifer versus sustaining it; the issues surrounding the formation of a local water district which could offer local control of the water resource to the residents of the Estancia Basin; and the costs and payment associated with the implementation of the Estancia Basin Water Plan.

During Thursday's meeting, the EBWPC addressed all of the comments raised by the residents of

the Estancia Basin concerning the Draft Water Plan. These concerns will be addressed in the Final Water Plan, copies of which will be available to the public on the 27th of November. The next round of public meetings is to discuss the draft of the Final Water Plan will take place as follows:

November 30 - Tajiue Community Center (7-10 p.m.)

December 1- Edgewood Elementary School (7-10 p.m.)

December 2 - Torrance County Courthouse, Estancia (7-10 p.m.)

December 3 - Moriarty High School (7-10 p.m.)

Everyone in the Estancia Basin is welcome to attend these meetings.

The next regular meeting of the EBWPC will be on Monday, December 14th at the Torrance County Courthouse. If you have any questions or comments, you can call Richard Spencer, Chairman, at 505-847-2941.

Estancia Basin Water Plan to be submitted

By Georgia Overlander

With the completion of a second round of public meetings, the Estancia Basin Water Plan is nearly ready to be submitted to the New Mexico Interstate Stream Commission for their review and approval.

The water plan covers a number of programs to be executed over the next 40 years to extend the water supply of the Estancia Basin from 120 to 260 years. Programs will be initiated to find out what water is available, what is really being used, how the aquifers interact and how recharge of the aquifers work.

The Estancia Basin Water Planning Committee expects to incorporate into the plan any ideas of substance

gathered during the meetings, and then deliver the plan to the commission sometime in January.

The Interstate Stream Commission will analyze the plan to see that it meets the mission they were suggesting. If the commission feels adjustments are needed, they will go back to the planning committee with their requests. Otherwise, the commission will accept the plan.

Richard Spencer, planning committee chairman, said, "Then it's up to us to implement it." He expressed disappointment that more residents did not attend the second round of meetings, but said he feels that it was a vote of confidence by area residents. He said there was very little direct opposition to the plan at the first round of meetings in October.

The Good News and Bad News About The Estancia Water Basin

By: Susie McComb

There is good news and bad news. If you're like most people, you want the bad news first. Here's the facts: The Estancia underground water basin is where many of us get our water. It is a closed basin, meaning it is not in contact with a constant above ground stream of water. Water re-enters the basin through recharge of rain and snowfall. This means, at this time, that more water is being pumped out than is being recharged back into the system. In the main aquifer, called the Valley Fill, there is a depletion rate of about 45,000 acre-feet of water a year. This depletion rate is expected to increase over the next forty years to about 50,000 acre-feet, as more people populate the Estancia Valley. Irrigated farming is expected to remain fairly constant. Most of us (about 95%) get our water from the Valley Fill. Consider also deteriorating water quality from such factors as broken septic systems,

abandoned wells, or the sheer increase in the concentration of septic systems as the population continues to grow.

Before you start feeling like a character in the movie *Soylent Green*, here's the good news. After five years of intensive research and gathering public input, The Estancia Basin Water Planning Committee has come up with a water plan to submit to the Interstate Stream Commission. This plan was presented at the December 3rd public meeting in Moriarty by Richard Spencer, chairman of the EBWP Committee and Jim Corbin, a water management consultant from Corbin Consulting, Inc. Lucy more, a mediator in natural resource areas was the facilitator. Realizing that water sustainability in the next forty years is not feasible under current water administration conditions and usage, the Committee proposed the creation of a special tri-county, basin-wide,

special water management district. This district would be under the control of local, grass-roots entities and potentially empowered to implement and execute the Plan. "Take control and ownership of your water resources now," urged Jim Corbin "or the federal government will step in and tell you how to do it." According to committee member Brain Greene, creation of a special water management district under local control would help to "keep the politics out of it."

Bill King, an agribusinessman from Stanley, was concerned that the creation of a special water management district would add another level of bureaucracy onto an already muddled situation. Most of the audience and committee members at the meeting emphatically agreed they did not want more bureaucracy. Jim Corbin also stressed the need for protection of existing water. **Continued on page 2**

Water continued from

"There's no incentive for agribusinessmen to conserve water, they lose it (the water rights) from the State Engineer's Office if they don't use it. If you can't protect water rights, users, you can't have effective conservation efforts," stressed Corbin.

Along with the creation of a basin-wide entity and designation as a Special Groundwater Management Area, conservation programs, water rights protection, the plan would also initiate a comprehensive monitoring and metering program to accurately quantify water availability and measure activity between acquirers. The Water Plan is a beginning. Emphasized Chairman Richard Spencer, and it will enable us to better educate ourselves on the actual challenges we face and potential solutions in the future. For more information on these issues and other concerns about our future water supply, contact Richard Spencer or Dee Tarr at 847-2941. Perhaps, the future doesn't look so bleak after all.

SIGN IN SHEET

October 26, 1998

Tajique Community Center

Please Print for our Mailing List

Name	Address	City	State	Zip	Phone...
1) Richard Tudor	P.O. Box 1471	Cedar Crest	NM	87008	235-5109
2) Michael Schwabach					384-5287
3) BERTIE W. DAHL	HC66 Box 212	MOUNTAINAIR	NM	87036	847-0027
4) Charles Hodgson	HC68 Box 85	Willard	NM	87063	849-1733
5) J.C. Coleman	N.O. Box 995	Mountainair	NM	87035	832-4256
6) Jimmy Sanchez	P.O. Box 118	Estancia	NM	87016	384-2364
7) Richard Spenn	P.O. Box 129	Mountainair	NM	87036	847-2941
8) DIEDRE TEE	P.O. Box 248 248	Torrion	NM	87061	
9) Guzman Akon	91 City Rd A0-36	Estancia	NM	87016	384-2825
10) Robert Akon	91 City Rd A0-36	Estancia	NM	87016	384-2825
11) Tommy Pate	PO Box 197	Torrion	NM	87061	384-4211
12) Pamela Pate	"	"	"	87061	"
13) Jim Carbin	E Descanso Rd	Santa Fe	NM	87505	466-4605
14) Debbie Terry	Box 202	Torrion, NM		87061	384-2236
15) Paul Davis	PO Box 1736	Torrion, NM	(MAILING ADDRESS)	87059	384-5376
16) Brian Greene	Rt 1 Box 22	Mountainair	NM	87036	849-1080
17) Ben Edwards	Grange HC66 Box 138	Mountainair	NM	87036	847-0808
18) Tony Thumco	Box 32	McClintock	NM	87032	384-5430
19) Bill Grant	Box 347	Colonia	NM	87016	384-2372
20) E. B. Remer	HC66 Box 189	MTAIA	NM	87036	847-2358

SIGN IN SHEET

Please Print for our Mailing List

	Name	Address	City	State	Zip	Phone...
1)	MARCOS F. ROMERO	HC 66 Box 163	MF. AVE	N.M.	87036	847-0544
2)	Amy Adams	80 A013	Albuquerque	NM	87016	384-5442
3)	Steve D...					384 2857
4)	George J. Ramirez	RT 2 Box 76	Mexico	NM	87036	847-0736
5)	Steve Dwyer	P.O. Box 625	Mhair		87036	847-2758
6)						
7)						
8)						
9)						
10)						
11)						
12)						
13)						
14)						
15)						
16)						
17)						
18)						
19)						
20)						

SIGN IN SHEET

Public Meeting Edgewood
10/27/98

Please Print for our Mailing List

Name	Address	City	State	ZIP	Phone...
1) John L. June	P.O. Box 2380 1330-04th Highway	Tijera	NM	87110	281-8700
2) Perry Sritchey	P.O. Box 813	Estancia	NM	87016	384-1333
3) Richard Sparr	P.O. Box 129	Alamogordo	N.M.	87036	847-2991
4) Michael Schaefer					
5) Bill Glendon	Box 342	Colonia	NM	87016	584-2370
6) Boyd Greenman	Box 4666	S Fe	NM		
7) Gary Schuchbach	P.O. Box 420	McIntosh	NM	87032	584-5139
8) Colman Brooks					384-2022
9) John L. June	P.O. Box 2380	Tijera	NM	87110	281-8700
10) DWAYNE BRITNELL	8 Roberts Drive	Edgewood	NM	87015	281-7764
11) Gavin Longmuir	P.O. Box 10,	Stanley	NM	87056	832-0259
12) Curtis Benz	P.O. 198	ESTANCIA	NM	87016	384-4116
13) Tom Torres	P.O. Box 370	Edgewood	NM	87015	281-3244
14) Gary Maye	2444 Louisiana	ADOC		87110	889 0117
15) Lewis Fisher	P.O. Box 93	Stanley	NM	87056	832-4241
16) Bill King	Box 5	Stanley	N.M.	87056	832 4356
17) Beverly Jenner	18 David Dr.	Edgewood	NM	87015	881-1917
18) Gary Chemistrud	Box 1795	Edgewood	NM	87015	281-5789
19) VERA WOOD	P.O. Box 970	Edgewood	NM	87015	281-9650
20) Maria Mesa	P.O. Box 541	Moriarty	NM	87035	832-6194

SIGN IN SHEET

Please Print for our Mailing List

	Name	Address	City	State	Zip	Phone...
1)	Kenneth M. Hill	6503 Antares Rd NE	Albuquerque	N.M	87111	OR 281-5000
2)	Scott S. Breaks	#19, C.R.-A102	Edgewood	NM	87015	281-1473
3)	Richard Tudor	P.O. Box 1471	Cedar-Crest	NM	87008	235-5709
4)	Robert DeBuck	P.O. Box 1458	Edgewood		87011	281-9364
5)	Sam King, Jr.					
6)	John 294	Buller Canyon Tr	Edgewood		87015	281-5401
7)						
8)						
9)						
10)						
11)						
12)						
13)						
14)						
15)						
16)						
17)						
18)						
19)						
20)						

SIGN IN SHEET

Public Meeting - Estancia, 10/28/98

Please Print for our Mailing List

Name	Address	City	State	Zip	Phone
1) K.L. EVANS	343 County Rd A-67	Estancia	NM	87016	384-2607
2) Kyle BENZ	PO BOX 198	ESTANCIA	NM	87016	384 5091
3) Vivian Cuarta	PO Box 415	Estancia	NM	87016	384-2421
4) LINDA POWELL	PO BOX 273	CORONA	NM	85318	849-1164
5) Candido Lucero	Hwy 14, 96547	Estancia	NM	87016	384-2802
6) Anthony Sp	PO Box 96	Torrone	NM	87061	384-2634
7) Jesse E Oddy	PO Box 105	Estancia	NM	87016	384-2394
8) Tom Massey	PO Box 401	Estancia	NM	87016	384-5205
9) JAMES MAREY	PO. BOX 996	Estancia	NM	87016	469-2527
10) MARY JONES	PO BOX 836	MOUNTAINAIR	NM	87036	847-0349
11) ZED Jones	PO. BOX 836	MOUNTAINAIR	NM	87036	847-0349
12) Hazel Breckford	HE 68 Box 21	Cedarvale	NM	87003	849-7755
13) DEAN BERENZ	P.O. Box 220	Mountainair, NM	NM	87036	291-0772
14) Bill R. Williams	CR-A035-60A	Estancia	NM	87016	384-5346
15) John Benton	62 CR B104	Estancia	NM	87016	384-2341
16) Milton McClain	970 Hwy 55	Estancia	NM	87016	384-2725
17) Jerry Shaw	P.O. Box 636	Estancia	NM	87016	384-2621
18) Don Spenser	Box 443	Estancia	N.M.	87016	384-2495
19) Bud Halperman		Stc			
20) Don Borer	PO. Box 535	Estancia	NM	87016	384-5102

SIGN IN SHEET

Please Print for our Mailing List

	Name	Address	City	State	Zip	Phone...
1)	Raymond Lee Dennis	PO Box 370	Edgewood	NM	87015	281-2880
2)	John Maguire	PO Box 2260				286-6686
3)	Jerry W. Virginia	Cypress Bay 232	Estancia	NM	87016	384-2480
4)	RAY SEAGER	P.O. Box 587	Edgewood	NM	87015	281-4445
5)						
6)						
7)						
8)						
9)						
10)						
11)						
12)						
13)						
14)						
15)						
16)						
17)						
18)						
19)						
20)						

SIGN IN SHEET

Public Meeting October 29, 1998
Moriarty

Please Print for our Mailing List

Name	Address	City	State	ZIP	Phone
1) Brian Greene	Rt 1 Box 22	Mountainair	NM	87036	849-1080
2) Lyn Greene	" "	"	"	"	"
3) PHIL GREEN	STANLEY				
4) Rik Thompson	37 Madole	Edgewood	NM	87015	286-2138
5) Lori Wafar	P.O. Box 704	MORIARTY	NM	87035	832-0057
6) Dean Swible	P.O. Box 102	STANLEY	NM	87056	832-4339
7) Stacy Vanharsen	PO Box 1833	Edgewood	NM	87015	281-8435
8) P. O. Y. C. A. I. N.	Rt. 1 Box 54	M Mori	NM	87036	847-2760
9) Cliff Brantman	PO Box 1816	Moriarty	NM	87035	832-6169
10) Jeff Peterson	600 2nd St NW - Suite 500	Alto	NM	87102	924-2603
11) Richard Spence	P.O. Box 129	Muir	NM	87036	847-2991
12) Peter Golden	Box 89	Moriarty		87032	384-2606
13) Bob + Kelly Gyle	Box 638	MORIARTY		87035	832-4344
14) G.S. Hobbs	Box 160	Moriarty		87035	832-6428
15) Phil Walker	1542	Moriarty		87035	832-0603
16) Nadine Storn	Box 27	Ledyard		87015	281-5853
17) Lloyd Storn	Box 27	Edgewood		87015	281-5853
18) Donald C Jensen	28 Benjamin Tr	Edgewood		87015	281-6078
19) ELEM + GEORGIA					
20) OVERLANDER	Box 1626	MORIARTY		87035	832-4335

SIGN IN SHEET 10/29/98 Moriarty, Comm. Center

Please Print for our Mailing List

Name	Address	City	State	ZIP	Phone...
1) Bill R. Williams	CK4075-GWA	Estancia	NM	87016	384-5346
2) Lewis Fisher	Box 73	STANLEY	N.M.	87056	832-4241
3) Tim Shields	PO Box 481	MORIARTY	NM	87035	832-4671
4) Shirley Maldonado	P.O. Box 7	Moriarty	NM	87035	832-4978
5) John L. Jone	P.O. Box 2380	Tijera	NM	87055	281-8706
6) Jim Schweberl	PO Box 420	McLusky	NM	87032	384-5739
7) Susie McComb	P.O. Box 307	Moriarty		87035	832-4087
8) Thomas McComb	" " 12	" "	"	"	832-6876
9) Darrell Rogers	PO Box 2843	Edgewood	NM	87015	286-2143
10) Steve Jones	P.O. Box 1310	MORIARTY	NM	87035	832-6614
11) Ron Bernier	170 Wiener Rd North	Stanley	NM	87056	281-5500
12) Ron Bernier					87056
13) ROGER RAYNER	PO Box 3367	MORIARTY	N.M.	87035	832-6206
14) Ken and Evans	PO Box 137	STANLEY	NM	87056	832-2133
15) Michael Allon	708 Lexco Rd	Moriarty	NM	87035	832-2110
16) Rusty Farnsworth	708 Lexco Rd PO Box 2859 Edgewood 87015	Moriarty	NM	87015	832-1404
17) Susan Banker	PO Box 87	McIntosh	NM	87032	384-1152
18) Brad Hammer					
19) Michael S. Schmidt					

SIGN IN SHEET

Public Mtg, Norwauky, 10/29/98

Please Print for our Mailing List

Name	Address	City	State	ZIP	Phone...
1) Rita Loy Summers	88 Chestnut Ln	Edgewood	NM	87015	254-1826
2) Dimee Elliott	PO Box 37	Meriandy	NM	87035	832-4065
3)					
4)					
5)					
6)					
7)					
8)					
9)					
10)					
11)					
12)					
13)					
14)					
15)					
16)					
17)					
18)					
19)					
20)					

ESTERITA DISCOUNT FOR WOMEN FROM

SIGN IN SHEET

Revision Review Meeting
Tajique 7-9 11/30/98

Please Print for our Mailing List

Name	Address	City	State	ZIP	Phone...
1) BERTIE H. DAHL	HC 66 Box 212	MOUNTAINAIR	NM	87036	847-0027
2) DIERRE TARE	PO Box 348	Toreon	NM	87061	847-2941
3) BENEWANDA GAVENS	HC 66 Box 138	Maintainna	NM	87036	847-2804
4) PAUL DAVIS	PO Box 174	Tajique	NM		384-5376
5) Richard Spence	P.O. Box 129	Mts. NM.		87076	847-2941
6) Michael Schwarbald	P.O. Box 470	McDonald		87032	384-7287
7) Brian Greene	Rt. 1 Box 22	Mountainair	NM	87036	849-1080
8) Mr & Mrs Robert Akin	91 CRAO36	Estancia NM.		87016	384-2825
9) Rita Horton	294 Breaker	Edgewood NM		87015	287-5401
10) Patricia Dimmons	88 Chestview Ln	Edgewood,	NM.	87015	384-1526
11) Debbie Terry	PO Box 202	Toreon	NM	87061	384-2280
12) Bill Reed	PO Box 168	Estancia	NM	87016	384-2372
13) Ann Adams	80 Box A013	Tajique	NM	87016	384-5442
14)					
15)					
16)					
17)					
18)					
19)					
20)					

SIGN IN SHEET

Revision Draft Plan

12/1/98 Edgewood

Please Print for our Mailing List

Name	Address	City	State	Zip	Phone...
1) Kenneth Hill	6503 Andover Ave	Albany	NM	87111	
2) Richard Tudor	P.O. Box 171	Cedar Crest	NM	87006-1171	
3) Curtis Benz	P.O. 198	ESTANCA	NM	87016	384-4116
4) Ron Ensminger	P.O. Box 208 (Hwy 20)	Moriarty	NM	87035	852-6213
5) Jeff Zirkow	27 East Gate Road	Tijeras	NM	87059	281-9876
6) Gary Martin	P.O. Box 1415	Edgewood	NM	87015	281-1294
7) Peggy Schindler	P.O. Box 40	Monticello	NM	87032	384-5132
8) Michael Schesbuch	P.O. Box 430	Metz			
9) Brad Kayerman		Sto			
10) Joe Mates	114 Tumbleweed	Sandia Park		87047	281-1298
11) Stanley Dunning	88 C Reservoir Ln	Edgewood	NM	87015	281-1536
12) Cori Anne Brooks	PO Box 58	Estancia		87015	384-2272 ext 5
13) James Walker	14 Valley Road	Edgewood, New		87015	281-9168
14) Richard H. Pinner	124 P.O. Box	Miller	NM	87036	847-2941
15) Bill French	Box 168	Edgewood	NM	87016	384-2322
16) Jerry Powers	16164 Box 181	Moriarty	NM	87035	832-2367
17) Doug Powers	Box 32	Moriarty	NM	87032	384-5150
18) LARRY KEATY	Box 1479	Edgewood		87015	286-1973
19)					
20)					

SIGN IN SHEET

Review Revisions to the Draft Plan
12/2/98 Estancia

Please Print for our Mailing List

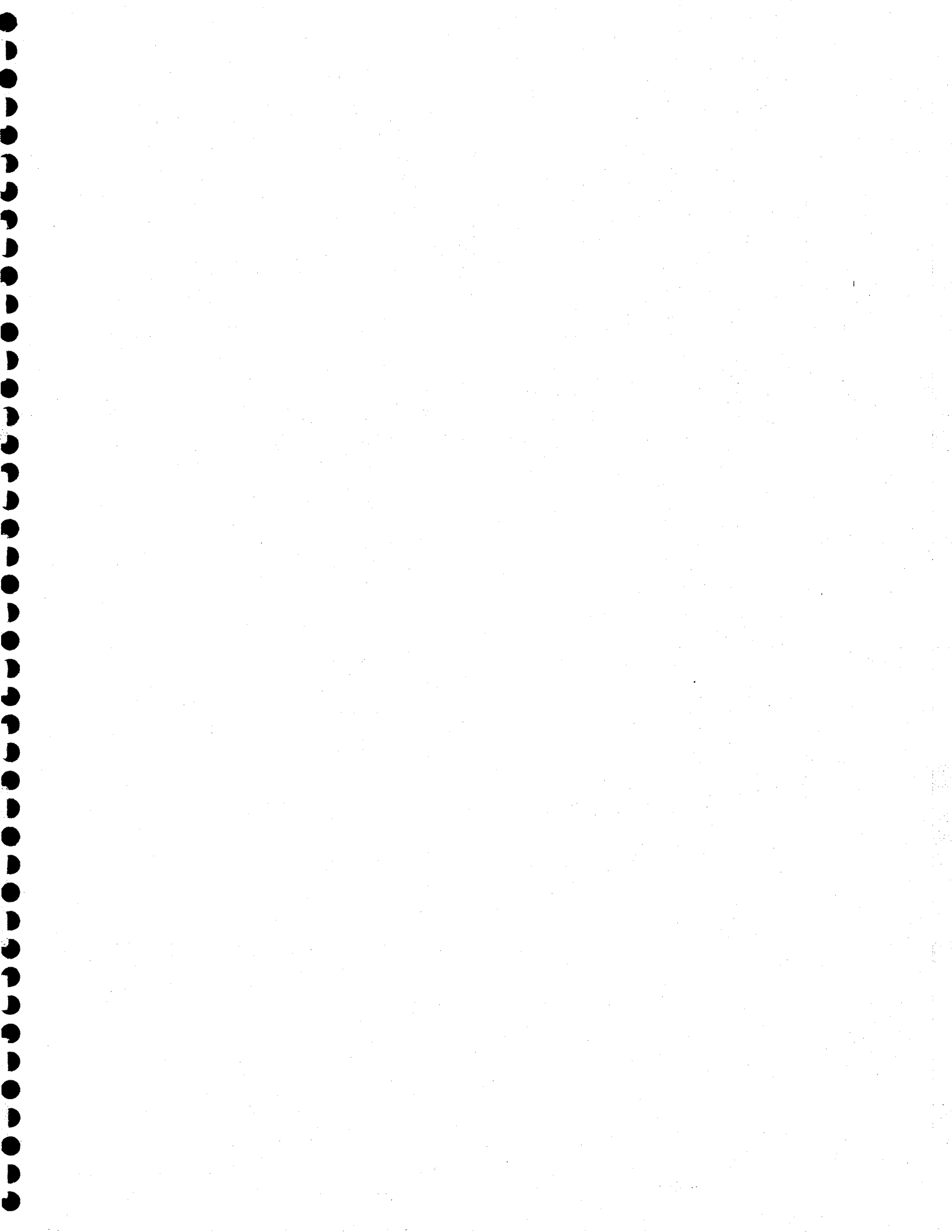
Name	Address	City	State	Zip	Phone...
1) Bud Pageman	Box 4666	Santa Fe			
2) Charles Haldin	HC 68 Box 85	W. 17 th	NM	87063	849-1733
3) Dan Sandoval	1709 Zona Lona NE	ALBUQ	NM	87112	w 844-9733
4) Betty L. Sandoval	1008 Trunadu SE	Albuq.	N.M.	87108	255-9189
5) Clara Hoxter	294 Broken Arrow Trail	Edgewood	NM	87015	281-5401
6) Pam McCary	P.O. Box 844	Estancia	NM	87016	384-3298
7) Richard Spence	P.O. Box 129	Madrid	NM	87036	847-2941
8) Pam Shires	P.O. Box 33	Medford	NM	87032	384-5430
9) Patricia Simmons	88 Crestview Ln	Edgewood	NM	87016	281-1836
10) Michael Schaubel					
11) Bill Neesh					
12) Blindus L. Jan					
13)					
14)					
15)					
16)					
17)					
18)					
19)					
20)					



SIGN IN SHEET Review of the Revisions to the Draft Plan
 Moriarty, 12/3/98

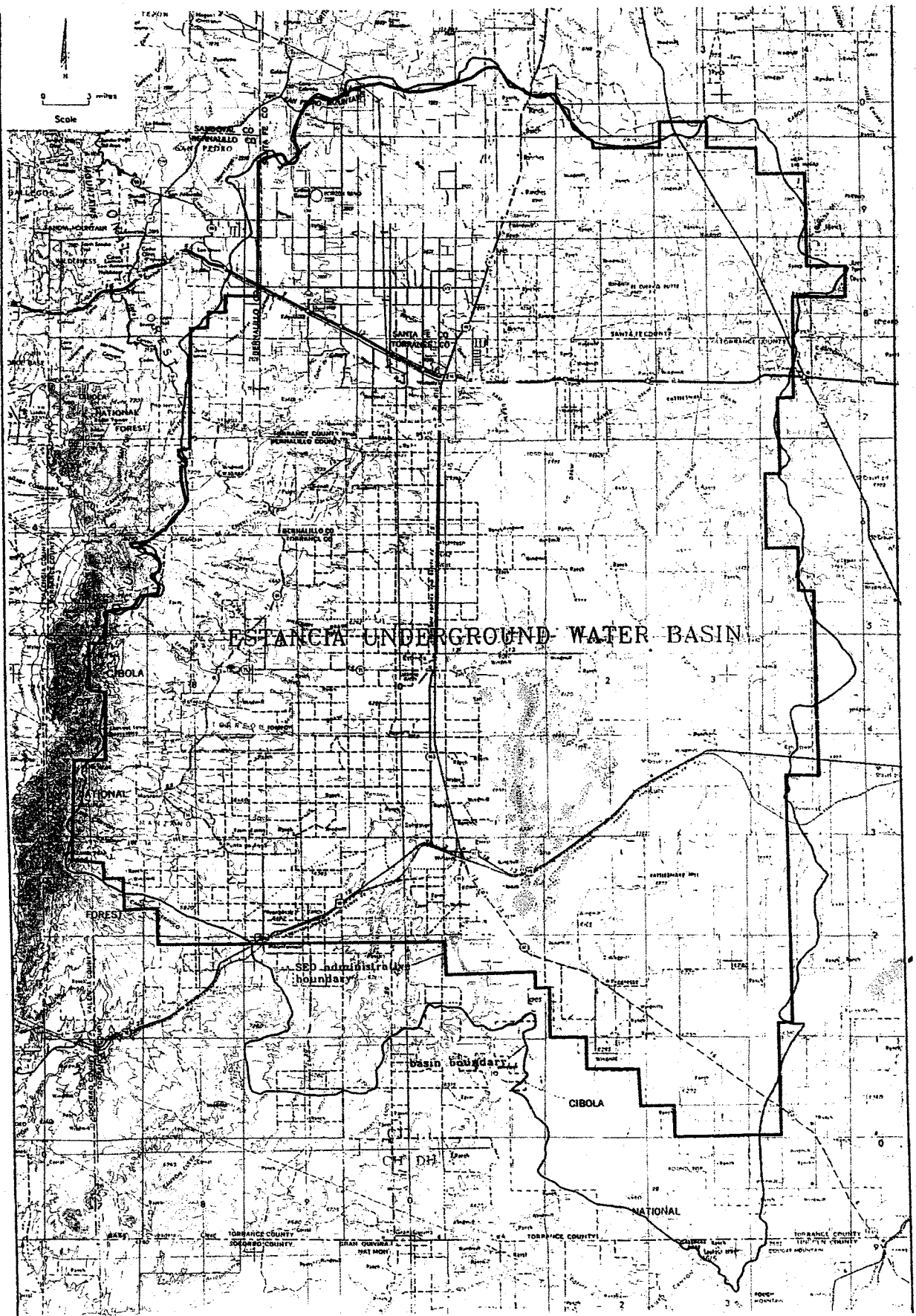
Please Print for our Mailing List

Name	Address	City	State	Zip	Phone
1) <i>Red Heppner</i>		Santa Fe	N.M.	87502	983-4092
2) Milton & Judy Bouffe	P.O. 988	Moriarty	N.M.	87035	832-4212
3) Lynn Schwebach	Box 420	McHale	N.M.	87032	384-5139
4) Dale Alderson	Box 111	Moriarty	N.M.	87035	832-4250
5) A.A. McCamb	Box 72	Moriarty	N.M.	87035	832-6876
6) Rick Thompson	37 Madde	Edgewood	N.M.	87015	286-2138
7) Bill King	Box 5	Stanley	N.M.	87056	832-4332
8) Susie McCamb	P.O. Box 302	Moriarty	N.M.	87035	832-4957
9) Brian Greene	P.O. Box 22	Mountain View	N.M.	87036	849-1080
10) <i>CAIANE BRACK</i>					
11) <i>Ed Heppner</i>					
12)					
13)					
14)					
15)					
16)					
17)					
18)					
19)					
20)					



APPENDIX D

Estancia Basin Water Level Draw-down Map



Source: Regional Water Plan Estancia Underground Water Basin, New Mexico, Shomaker et al. 1997

Figure 1. Estancia Underground Water Basin

Figure 21. Map showing water-level changes from 1910 to 1956 in the Estancia Underground Water Basin.

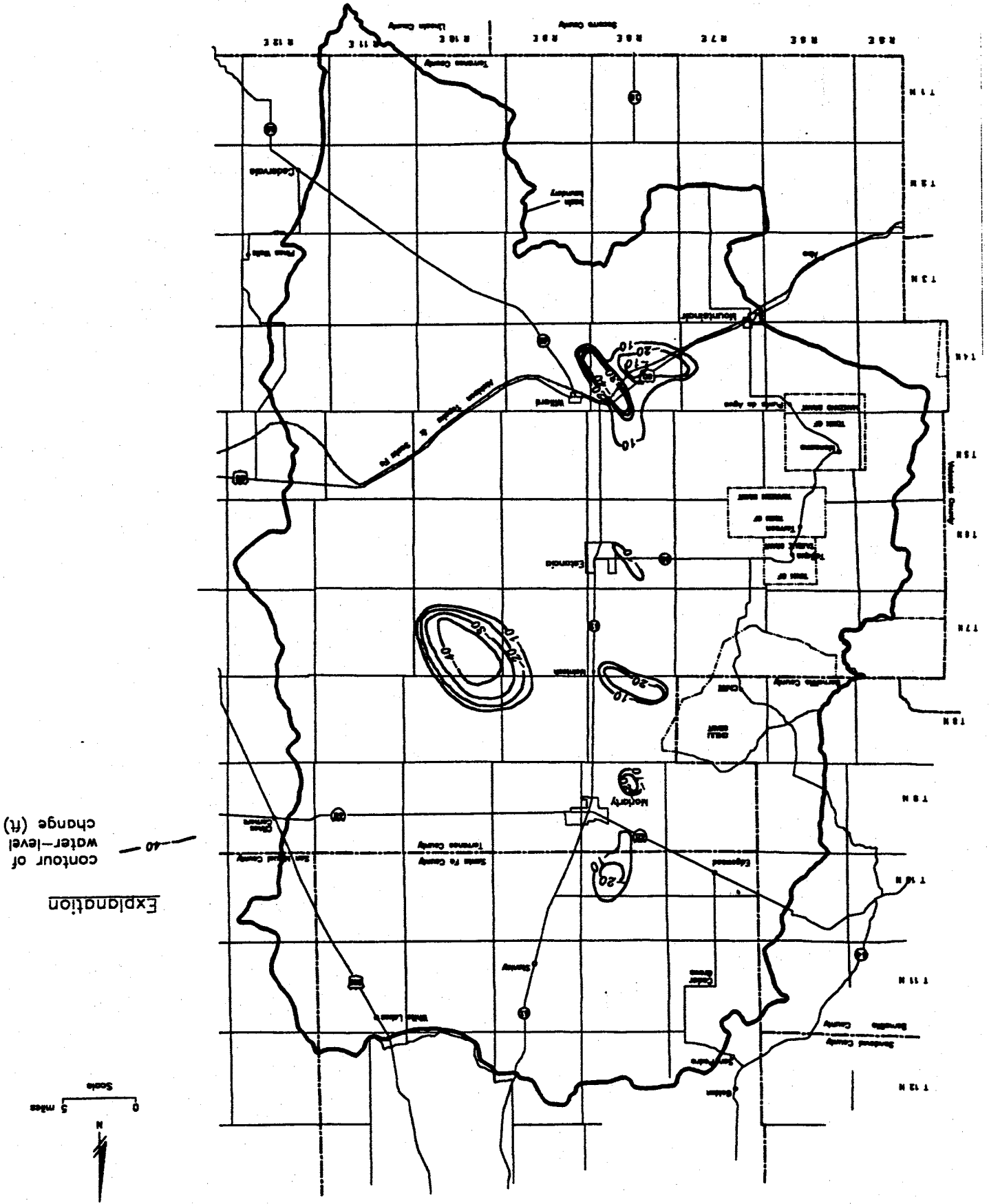
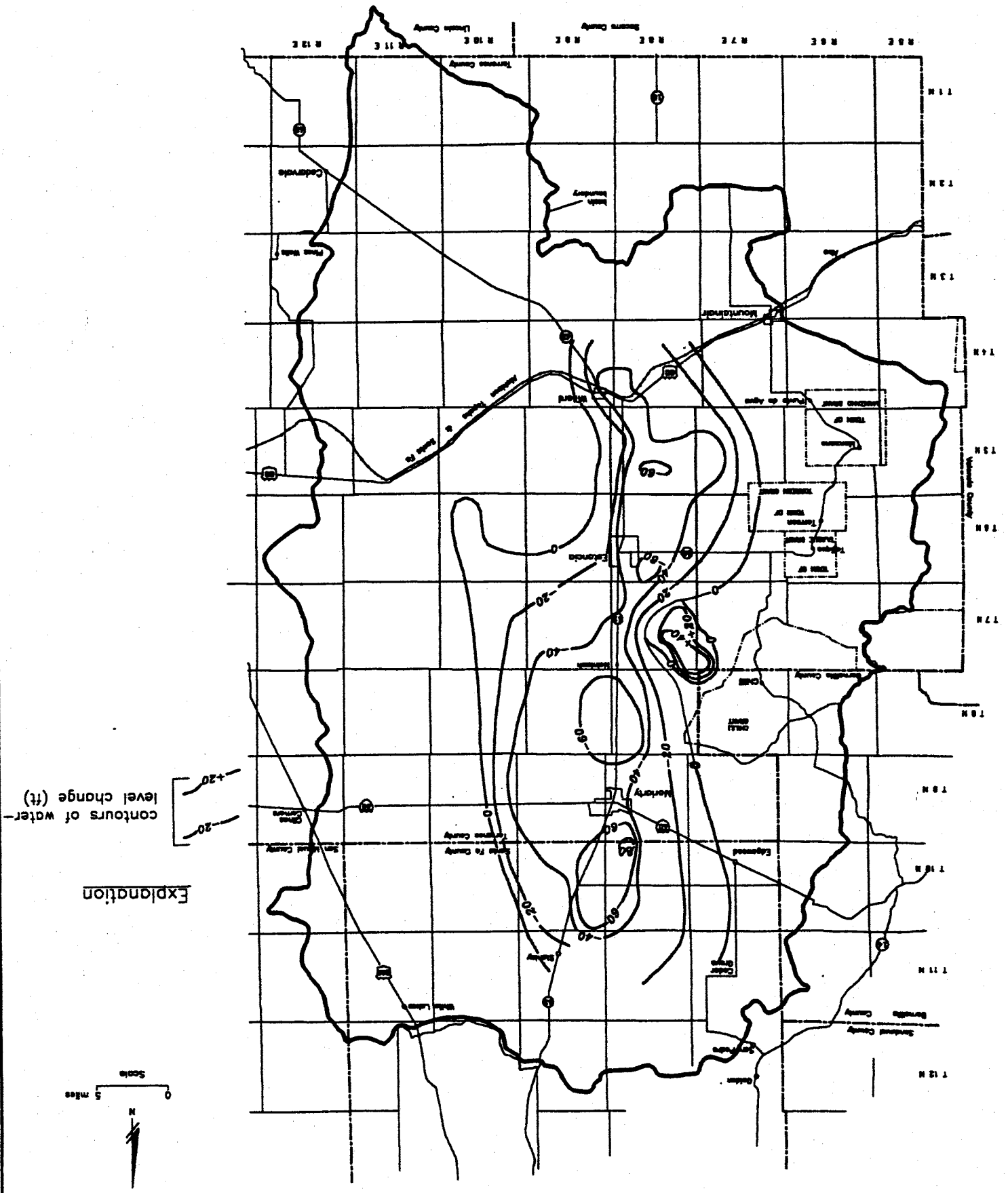


Figure 22. Map showing water-level changes in the valley fill aquifer from approximately 1956 to 1995 in the Estancia Underground Water Basin.





APPENDIX E

Recommended Program Outlines

CONSERVATION MEASURES

EDUCATION COMMITTEE:

A. Identify Audience

1. School
 - a. Second
 - b. Fourth
 - c. Junior High
 - d. High School
2. Elected Officer
 - a. Municipal
 - b. County
 - c. State
 - d. S.W.C.D. Board

B. As Needed

1. Adult Program
 - a. Civil Clubs (Rotary, Lions, Maverick, etc.)
 - b. Water Fairs
 - c. Booth at County Fair
2. Youth
 - a. 4-H
 - b. FFA
 - c. Boy Scouts and Girls Scouts
3. Demonstrations
 - a. Water Conservation Practices
 1. Home
 2. Farm
 3. Businesses
 - b. Holistic Water Management
 - c. Economically feasible alternative crops
 - d. Irrigation systems

Education - - Conservation

A. Identify Audience - Water Users

1. Homes
2. Agriculture
3. Businesses
4. Municipalities
5. Counties
6. Schools

B. Topics of education

1. Closed Basin - define

2. Mined Aquifer - define, explain the finite availability of water - use the model of an aquifer as a teaching tool. End the myth of an underground river. Use the maps from the Shomaker report to show the people areas of drawdown and areas of heaviest water use. Explain the total dissolved solids and the correlation between areas of drawdowns and increase in TDS.

C. Conservation

1. Water users supplied by private or public water supply systems can be encouraged or stimulated to conserve through billing credits. Credits could be given for xeroscape landscaping and reduced water usage. Charge a base rate but give a discount to the users who decrease the amount of water used. The reverse educational process can be used by incrementally increasing charges for use over established "allowable" use rates.
2. Domestic Wells - Perhaps through electric bills or TCSWA bills, a conservation message could be carried each month. The only way to get people to conserve may be through risk management. If people are made aware that the water is finite, maybe they will be convinced to limit their water use. Newspapers could also deliver info about ways to conserve. Lobbying the State to change the amount of water allowed on a domestic permit would be beneficial. This could take a long time but may be an option worth pursuing.
3. Agriculture - Use the maps from the Shomaker report to illustrate areas of drawdown coinciding with areas of intensive irrigation. The report also addresses irrigation methods. A case could be made for a demonstration project for drip irrigation, although the costs may limit this as an option to area irrigators. Perhaps some type of loans or tax credits could be made available for area farmers - to install drip irrigation and other conservation practices.
4. Schools - A traveling exhibit could be maintained for use throughout the basin. Perhaps the most receptive audience may be the children. Children could be taught about aquifers and how the water is not an unlimited resource. There are many conservation ideas out there that could be taught to children - brushing teeth without the water running. A little research into some of the numbers available (low flow toilets, watering lawns, mulching..) would impress and educate children. In turn, the children would go home and teach their parents.

Probably the best way of communicating to everyone would be through the establishment of a traveling exhibit, which with minor changes could fit the needs of each individual audience. The message remains the same, conserve water, although the means to accomplish the goal changes with the differing audiences.

LEGISLATIVE COMMITTEE:

- A. Identify areas or procedures that can only be dealt with through the legislative process:
 - 1. Changes to existing state water law
 - a. Exportation of water
 - b. Protection of existing water rights
 - c. Water conservation and basin administration policy
 - 2. Funding issues for the Estancia Basin:
 - a. Studies/Demonstrations
 - b. Implementation of plans
 - c. Cost share or other projects
 - 3. Special considerations - Special Water Management Area
 - 4. Issues impacting water in general not specific to the Estancia Basin
- B. Identify all legislators with a constituency within the limits of the Estancia Basin:
 - 1. Phil Griego
 - 2. Sue Wilson
 - 3. Rhonda King
 - 4. Others
- C. Meet with legislators/singly or in a group:
 - 1. Explain EBWPC
 - 2. Solicit their support for funding
 - 3. Keep them informed of issues and progress
 - 4. Continue contact to implement plan
- D. Network
 - 1. All SWCD's within the basin; they are already working on conservation, watershed, and riparian issues
 - 2. Other similar waterbasins/work on areas of mutual interest
 - 3. NMACD/for lobbying
 - 4. Other organizations with interests in water conservation/quality etc.

Ideas to bring to the legislature:

- A. Encourage conservation.....don't penalize someone for conserving water. Don't take away water rights for water not being used due to water conservation practices.
- B. No transfers of actual water (maybe even water rights) out of a closed basin.
- C. Standards for testing wells; levels and quality.
- D. Prevent double dipping....selling water rights then subdividing property for residential use and individual residential water wells.
- E. Funding for study to do Estancia Basin inventory and status of wells.
- F. Funding to cap abandoned wells
- G. Cost share for conservation measures that improve watershed or water quality.

AGRICULTURAL CONSERVATION:

- A. Irrigation Methods and Conservation Methods
 - 1. Sprinkler
 - a. Low Pressure or LEPA
 - b. Low Pressure, Low Angle, Big Droplets Nozzles
 - c. Daming Diking Tillage
 - 2. Flood
 - a. Surge Flow
 - b. Tail Water Ponds
 - c. Laser Leveling
 - d. Grated Pipe or Lined Ditches Instead of Dirt Ditches
 - 3. Drip
 - a. Experimental plots with economic benefits proven
 - b. Cost share with producers
- B. Tillage Management
 - 1. No till or minimum till
 - 2. Ridge till
 - 3. Plowing of soil in the fall
 - 4. Chemical Control of weeds
 - 5. Timing of tillage

C. Soil Moisture Management

1. Water demands of crops made available to producers
 - a. NRCS Irrigation Guide
 - b. Internet Advice
2. Climatic Information made available to producers
 - a. Accurate rainfall information
 - b. Humidity and Dew point information
 - c. Transpiration rate of different crops
3. Soil Moisture Monitoring
 - a. Tensiometer
 - b. Ball Method and Experience with soil types

D. Total Crop Management

1. Meter all wells to know actual water applied
 - a. Make production more efficient
 - b. Small yards and gardens to control use
 - c. Cost share meters
2. Suggest management strategies for most efficient water use and maximum yields
 - a. Insect control
 - b. Weed control
 - c. Timing of tillage, planting, and irrigation
 - d. Crop consultants recommended
3. All practices should be economically feasible for producers
 - a. Highest economic yield as major goal

E. Tax Water

1. More water use - higher tax
2. Tax to include homes, businesses, agricultural, and water companies
3. Tax money goes toward conservation practices

Education and staying abreast of new technology in all the above mentioned areas is of vital importance.

WATERSHED HEALTH-TERRAIN MANAGEMENT COMMITTEE:

A. Erosion-Runoff Protection

1. Developed Urban Areas-Towns, Cities, Subdivisions
 - a. Provide runoff disposal/retention areas, pits, ponds, and wetlands.
 - b. Protect runoff quality; less salt on streets, no disposal of oil or contaminates

- c. Follow liquid waste standards and guidelines
 - d. Minimize erosion through proper construction of the following: roadways, utility easements, right of ways, and building sites
 - e. Minimize wind and water erosion of vacant lots, yard, and open areas through controlled use
2. Developed farm lands and areas disturbed by human Habitation outside urban areas
- a. Protect identified flood plain recharge zones
 - b. Wells and water diversion areas should be subject to approved methodology under federal, state, or local rules, regulations, and authority
 - c. Fertilizers and other chemicals associated with crop production and/or commercial/industrial uses must be applied in strict accordance with standards recommended by federal, state, and local guidelines
 - d. Roads, buildings, structures, and developed areas should be built in accordance with erosion and pollution control recommended by federal, state, and local guidelines
 - e. Vehicular traffic should be controlled to prevent erosion especially in arroyos or water recharge zones
 - f. Avoid construction in wide arroyos - use bench areas as construction sites. All bare ground created by human disturbance or activities should be re-seeded with native perennial plants as outlined by NRCS Ecological Site description
 - g. Existing state, county, and private roadways, easements, and right of ways should be constructed and maintained with culverts and turnouts to prevent extended concentration of water and high velocity runoff
 - h. To prevent erosion and pollution of runoff areas grazing use of fenced in areas for farm animals, wildlife, and pets should be in accordance with density guidelines as follows:
 - open range stocked according to NRCS Ecological Site Index
 - Confined/feed farm animals (1.0 acre/animal minimum area)
 - i. Recreation areas should be managed so that terrain damage and erosion of soils, and damage to plant cover, is kept to the minimum under established guidelines
3. Undeveloped Open Range and Forest Woodlands
- a. Maintain or improve ground cover to protect soil resource and minimize soil movement through proper grazing, woodland, and forest management

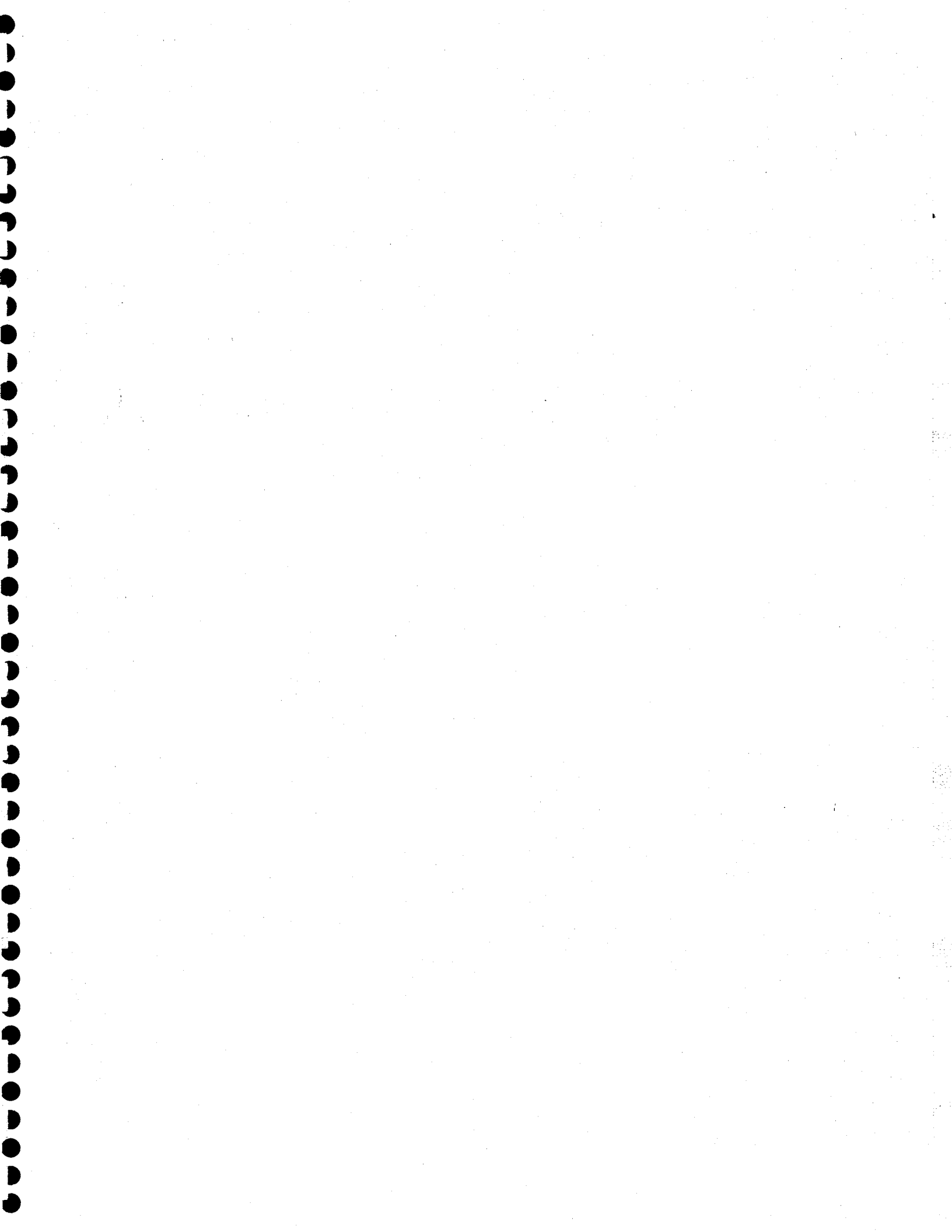
- b. Eroded areas should receive treatment through preventive erosion methods and controls to hold runoff in place and enhance percolation into the water table
- c. Vehicular traffic should be controlled to prevent erosion, especially in arroyos or water recharge areas
- d. Roadways, easements, and right of ways should be constructed and maintained in accordance with federal, state, or local guidelines
- e. Wells and water diversion areas should be subject to approved methodology under federal, state, or local rules, regulations, and authority
- f. Abandoned wells should be filled, compacted and covered with a 6'x6'x6" concrete slab

B. Tree-Vegetation Management

- 1. Develop healthy watersheds through woodland management techniques designed to reduce water runoff
- 2. Thinning of thick pine and juniper woodlands to allow understory vegetation to return which will protect woodland soils from erosion and enhance recharge
- 3. Develop economic methods of brush removal that will provide economic incentive to remove high tree densities in the juniper woodlands
- 4. Vegetation management to improve desirable ground cover and reduce noxious weeds, brush, and excess trees should be made available and practiced by both governmental and private land owners
- 5. Develop mechanical, chemical, and natural control methods to control invading species of tree, shrubs, brush, grasses, and weeds that provide no economic or environmental benefit to the watershed health or the community economic stability

COMMUNITY WATER/WASTE WATER SYSTEMS - SUBDIVISION/COMMERCIAL/INDUSTRIAL COMMITTEE:

- A. Conservation and conservation planning is required of many kinds of new development, and many types of government funding. Funding and approval for many water initiatives requires an acceptable plan.
- B. Municipal and Industrial Uses are regulated by County Codes, NEPA (fixtures, etc.), and the State Engineer. Plans are needed as above.
- C. Agriculture conservation plans are required by Bureau of Reclamation, State Engineer, and ISC.
- D. Plans must be progressive and require actions and targets.



APPENDIX F

Letters and Responses—Public Input

Robert Fordyce

care office box 369 Elaine, W.V. 25031

Phone 360 532 0969

Fax 360 532 1320

October 29, 1998

Mr. Richard Spencer
Estancia Basin Water Planning Committee
P. O. Box 168
Estancia, NM 87016

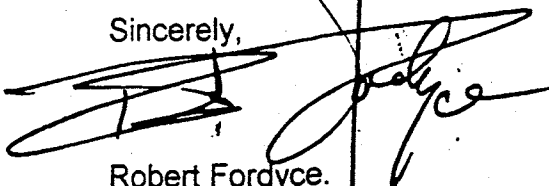
Dear Mr. Spencer:

Yesterday i received your flier dated October 15th about "...EBWPC ...final stages of completing Phase II of the the Water Plan...". Since we no longer live in the area but still do have property holdings I should appreciate it if you would send me a copy of "Phase II of the Water Plan".

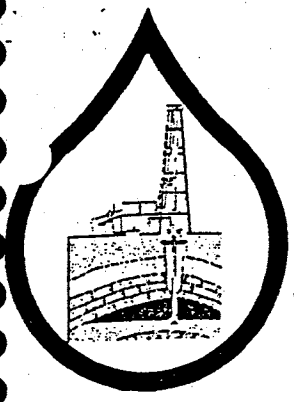
As a property owner I am sure there will be items in this plan which deserve comment.

If you should have any questions please call. Thank you very much.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Fordyce", is written over a vertical line that extends from the text above. The signature is stylized and somewhat cursive.

Robert Fordyce.



Estancia Basin Water Planning Committee

Box 168 Estancia, New Mexico 87016

November 24, 1998

Mr. Robert Fordyce
P.O. Box 969
Blaine, WA 98231

Re: Response to your letter, dated October 29, 1998,
regarding the draft Estancia Basin Regional Water Plan.

Dear Mr. Fordyce,

Thank you for your letter of October 29, 1998, and your time and interest.

The Water Plan (Final Draft) costs \$10.00 plus \$5.00 postage, payable in advance. In lieu of the Draft Water Plan, I have included a copy of the Draft Executive Summary at no cost for your review. Please let me know if you still want the Draft Plan (approximately 100 pages), and if so please send a check or money order to cover the cost. We will refund any monies not required.

In terms of an update of ongoing and future activities, we just completed the four public meetings on the Draft Water Plan. We were well pleased with the very positive reception it has received. We also have received some excellent constructive suggestions for plan improvement, which we gratefully welcome. There are a few who seem to desire the "status quo", but even those individuals and organizations have provided extremely useful comments and input which is appreciated. The basis of the Water Plan is local responsibility and local action through existing local entities such as the Soil and Water Conservation Districts, the Counties, the municipalities, appropriate state and federal organizations at the local level, the "land grants" and the local utilities. We have recommended a variety of potential programs, but have intentionally left the final development and execution of these programs to the above entities. We have suggested that the Estancia Basin Water Planning Committee continue in an oversight and coordination role to ensure a focused, integrated effort on a Regional basin-wide basis. We are recommending a dedicated Water

Torrance County Santa Fe County Bernalillo County

"Coordinated water resource planning for the Estancia Underground Water Basin."

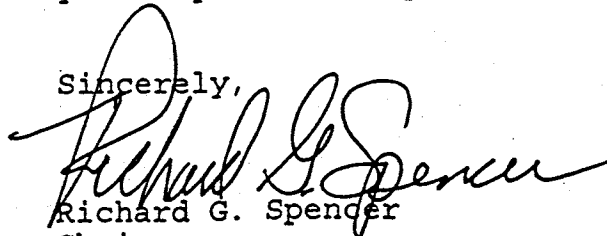
Trust Fund that can only be used for water resource related activities in the Basin. We are suggesting that the Trust Fund be administered by a citizen Board of Directors that are not paid and who are appointed by the same local government entities that appointed the Water Planning Committee.

We plan to incorporate the constructive suggestions and rewrite or improve those portions where some people appear to have misread our intent and/or recommendations. We've spent the last five years and three rounds of public meetings (1995, 1996, and 1998) coming to this point and feel that it is time to finalize the Water Plan and move on to the specific program development, funding and execution phases. The Final Review Water Plan should be completed by November 24, 1998 and will be available for public review and additional comment by November 25, 1998. We plan to present the Water Plan again with any updates at four public meetings beginning November 30, 1998 through December 3, 1998. Any further editing will be accomplished in December, 1998. We intend to forward the Water Plan to the New Mexico Interstate Stream Commission by January 5, 1999 for their consideration and acceptance. This is an ambitious schedule, but we feel we must have a reasonable plan in the hands of the New Mexico Interstate Stream Commission and the other state and local governmental entities prior to the start of the legislative 60 day session in late January 1999.

It may be that you would want a copy of the Final Review Water Plan that is going to be presented in the public meetings starting November 30, 1998 as opposed to the Final Draft Water Plan used for the first round of public meetings earlier this month. Please let us know your desires.

I hope this reply is responsive to your needs. Again, thank you very much for your interest!

Sincerely,



Richard G. Spender
Chairman

Estancia Basin Water Planning Committee

RGS:dlt

Enclosure

5 pages**John L. Jones**P.O. Box 2580
Tijeras, NM 87059

November 12, 1998

Estancia Basin Water Planning Committee
C/O Lucy Moore
P.O. Box 129
Mountainair, NM 87036

Re: Comments on Regional Water Plan

Thank you for the opportunity to comment on the plan. First, however, I would like to applaud the efforts of the Estancia Basin Water Planning Committee (EBWPC) for having worked so long and so diligently on this very important task. Their task was, and is, not an enviable one but it is critically important. There are no easy answers.

I attended two of the public meetings during the week of October 26th - Edgewood and Moriarity and I have read the complete draft. I am employed as the Chief Operating Officer for Entranco Water & Wastewater Cooperative Association, though my comments are my own, and not those of the Cooperative.

The Committee's examination of five scenarios was prudent. I believe the Committee made the correct choice in picking scenario five - to extend the life of the Basin without killing any particular entity or interest group. The devil of any problem or situation is always in the details and this scenario is no exception. The problem is with the numbers, and those can be summarized as follows:

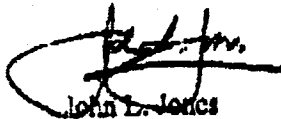
- The savings associated with improved efficiency of agriculture, while agricultural acreage does not decline, are overstated
- The Plan does not adequately deal with the recharge available to the Basin - it underestimates the availability of recharge
- The Plan seems to deal with all withdrawals of water as coming directly out of valley fill storage - they don't
- The Plan ignores the availability of proven water sources in the Madera and Glorieta structures, which is short sighted and harmful to the Basin. It is imprudent to continue to use a methodology of accounting for water in the Basin that is over 30 years old and using values that have since been shown to be erroneous as well.

Entranosa has made a quantitative model of the Basin available to the Committee and other entities. I believe it would be helpful to use the model in future estimates of "what if" scenarios. Many of my comments are based upon our use of the model to evaluate the Plans assumptions. For the most part, I believe the goals of the Committee are within reach today - not 40 years from now. I do not agree with the proposal to "freeze" water rights as they exist today, for reasons stated in the attached pages.

The notion of a new oversight committee or governmental body to "manage water" in the Basin needs to be closely examined. Another layer of bureaucracy, be it in a complimentary function to that of the Office of the State Engineer (OSE) or as an independent body will be detrimental to the process. We DO NOT need another bureaucratic layer. If the Body is an elected group of citizens, the political process will weigh heavily on water use - confusing the issue with other established political bodies, to include the County Commissions - all three of them. Zoning can drive water usage. If the Body is independent and members can not be recalled - then the old phrase "absolute power corrupts absolutely" will be evidenced. I encourage the EBWTC to be very careful in making a recommendation along those lines. I suggest augmenting the OSE with the manpower and tools to manage the Basin, based in part of the recommendations of the EBWPC and its successors, as well as by the provisions of law - how ever that law may be changed or enhanced.

I hope the attached pages provide some value to your process. Thank you for your time.

Sincerely,



John L. Jorics

Savings due to improved efficiency from agricultural usage.

Use of agricultural lands in the Basin is declining, albeit with some spikes. Reported consumption of water for agricultural purposes is lower now than it was in the 1970's but peaked in the mid-1980's. Not surprisingly, since agriculture accounts for between 90% and 95% of the usage in the Basin, the rate of decline has started to flatten out since that time. The rate of decline further flattens from the point in the early 90's when escalating natural gas prices drove the abandonment of numerous wells.

There was an interesting comment made during the Edgewood meeting about improving the efficiency of agriculture - a comment made by a fairly substantial flood-irrigator. This individual stated that the cost to improve his irrigation system would run about \$1000 per acre and it would be cost prohibitive to do so. I would infer from that statement that unless there is a significant amount of grant money available that would subsidize this effort - there is at least one flood irrigator who will not comply with this effort and there are most likely others.

I believe agricultural use of the Basin will continue to decline over the next several decades. I do not believe it will disappear, but neither do I believe significant savings obtained from agricultural efficiencies will be obtained.

Recharge to the Basin.

Recharge to the Basin is arguably in the 30,000 AFY range. The Plan only allows for 8,000 AFY. This is a renewable source equivalent to 1.2 million AF over a 40-year period.

Water Withdrawals from Storage.

The EBWPC seems to interpret the net withdrawals from the valley fill (estimated to be 50,000 AFY by 2040) to be equivalent to depletion of the valley fill aquifer storage. In quantitative hydrologic terms, net withdrawal by wells is accounted for, not solely by storage depletion, but by induced recharge or captured discharge from the flow throughout the system boundaries. The quantitative model created by Entrarosa (ESTAN97) implies that about half the current net withdrawal by wells is accounted for by capture, largely by salvage of evapotranspiration losses from the playa lakes at Laguna del Perro, and partly by capture of flow of waters pouring into the Galestee and Tularosa Basins. The remaining half of the current net withdrawal by wells is accounted for by aquifer storage depletion. Therefore, I believe the Committee overstates the rate of aquifer depletion in the Basin by a two-fold factor.

I have attached a table to compare the numbers from the Plan and those derived from the quantitative model developed by Entronsoa. The Plan allocates effects to only one of two sources of water. The model implies that more water remains in the valley fill in year 2040 (5.5 million AF) without reducing current usage then the Plan allots with a goal of reduced usage. Please examine it carefully.

Water Availability & Accounting.

According to the Shemaker report of January 1997, there is over 85.4 million-acre feet of water in storage in the bedrock of the basin commonly referred to as the Madera or Glorieta - as well as others. To ignore such a resource is generously called imprudent. In spite of how the OSE administers the Basin TODAY, the Committee should look at how it should be administered in the future.

I referred to "sources" a couple of times in the above discussions. The difference in sources is critical with regard to the long-term lifetime and sustainability of the Basin supply. Planning based upon the storage component alone means the resource has a finite lifetime related to the rate of storage depletion. Recognizing that there is about 30,000 AFY of flow through the system will mean that 30,000 AFY is the sustainable floor on the Basins yield. Aquifer storage can be used for a period of many centuries at withdrawal rates greater than the 30,000 AFY, and eventually reduced to that sustainable floor at some point in the future - or not. As water recovery technologies advance, and they will, additional water sources for the Basin will, for lack of a better word, surface.

The resource is sustainable at a level of net withdrawal of near 30,000 AFY, and the aquifer water levels can be controlled to remain above the level of the playa lakes to prevent unacceptable encroachment of saline water. The Entronsoa model can simulate sustainable rates and water levels for planning purposes. Just use it.

TABLE
COMPARISON OF WATER ACCOUNTING IN
EBWPC RECOMMENDED REGIONAL WATER PLAN
AND IN THE QUANTITATIVE HYDROGEOLOGIC MODEL ESTAN97

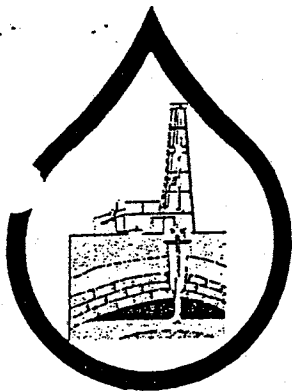
	Water Plan	Quantitative Model
1996 Net withdrawal by wells	45,000 AFY	46,250 AFY
2040 Projected net withdrawal by wells	50,000 AFY	51,443 AFY
2040 Goal for net withdrawal by wells	20,000 AFY	NA
1996 Depletion of valley fill storage	45,000 AFY	23,660 AFY
2040 Projected depletion of valley fill storage	50,000 AFY	25,164 AFY
1996 Induced capture of flow through from playa ET and other sources	0	22,350 AFY
2040 Induced capture of flow through from playa ET and other sources	0	26,269 AFY
Valley fill storage remaining in years:		
1910	8.1 million AF	7.8 million AF
1960s	7.8 million AF	7.5 million AF
Today	6.5 million AF	6.5 million AF
2040	5.2 million AF	5.5 million AF

Assumptions:

1. Valley fill storage does not include 85.4 million AF in bedrock storage reported by Shomaker (1997) report, Table 31.
2. Goal of 20,000 AFY net withdrawal.
3. Projected 51,445 AFY net withdrawal.

Estancia Basin Water Planning Committee

Box 168 Estancia, New Mexico 87016



November 24, 1998

Mr. John L. Jones
P. O. Box 2380
Tijeras, NM 87059

Re: Response to your letter, dated November 12, 1998,
regarding the draft Estancia Basin Regional Water Plan

Dear Mr. Jones,

The Estancia Basin Water Planning Committee appreciates your attendance at the public meetings and willingness to comment and make constructive suggestions. While we may disagree with some of your conclusions and comments, most of our disagreement is a matter of degree and possibly timing. You are certainly correct that it is a very difficult and demanding, almost impossible, task to develop a Regional Water Plan. We would suggest that one of the valuable elements of the Plan is the discussion of the underlying premises on which it is founded. The Plan also is intended to take advantage of consensus and ongoing efforts, enable a better use of resources, and help to delineate and shape future efforts that will begin to resolve some of the unknowns and settle some of the controversies.

We appreciate comments on our selection of Scenario #5 upon which to base the Water Plan. The intent of Scenario #5 and its goals is to, as you indicate, "move forward in a prudent manner" seeking to minimize effects on the social, cultural and economic fabric of the Basin to every extent possible. Another major intent is to shape and focus the future water resource related efforts in the Basin to ultimately ensure a sustainable water supply for the Basin's residents while highlighting concerns and developing answers to those concerns and questions.

You indicate that the devil is in the detail and we would certainly agree with you. However, we would also indicate that the devil is also in the perception of what data is relevant. We do believe that actual declining well levels over time and the "mud on their boots experience" of our

Torrance County

Santa Fe County

Bernalillo County

"Coordinated water resource planning for the Estancia Underground Water Basin."

fellow residents is also important. Wells that have dried up or are drying up, well productions that have reportedly fallen off in the Valley Fill, Madera and Glorieta Aquifers coupled with the experience of geologists and drillers (oil and gas exploration and dry well holes) that conflict with the view of those who believe there is an inexhaustible abundance of water in the Basin, are of concern to us. The fact that many of the communities and individuals who live in the Valley Fill Aquifer Area would suffer severe economic harm, even if water in some amount is in underlying aquifers, is also of concern. Thus, we have adopted a fairly conservative approach (reasonable from our point of view after five years of forming consensus in our committee) that says - "show us the water".

You could be right about the irrigated agricultural savings being overstated. Certainly some members of our Committee believe that to be the case. The goals were developed based on actual reported savings from several programs in Kansas, Oklahoma, Texas, and California. We cut the reported savings in those programs in half to set our goals; and, since we really don't know what will actually work in the Estancia Basin we have suggested "pilot programs" to ascertain what works and what is achievable. We recommended that the Soil and Water Conservation Districts and Farm Bureau take the lead in these programs. Their members are the Basin's agricultural experts and stand to gain or lose the most in terms of their livelihood based on these programs. Clearly if New Mexico's "use it or lose it" policy with respect to water rights is not changed to protect existing water right owners (holders) any rural conservation program will fail. Equally disturbing is the continued granting of water rights in a basin that appears to have a finite amount of water available for use by its residents. Existing holders and users of water rights can not be expected to conserve if both of the above policies continue.

As you know irrigated agriculture used more water and irrigated more acreage in some past periods than today. Given the historic fluctuation of irrigated agriculture in the past 30 plus years based largely on economics, government programs, and to some degree on the climate, we have decided to hold agriculture fairly constant at the present level of use. If it goes down significantly over the next 40 years as you indicate and its demand is not taken over by some form of industry or homes (a serious concern of many), then it should be easier to reach a sustainable water supply posture. While some like to also postulate low water use and clean water use industry, the present policies of essentially unlimited water could just

as easily result in a very heavy use, dirty water industry scenario that could deliver tremendous short term economic gain with disastrous long term effects.

We believe recharge available to the Basin probably exceeds your 30,000 acre-feet comment, probably closer to 37,000 acre-feet. However, that recharge is not appearing in the Valley Fill Aquifer. It could be lost in transport, intercepted by users, intercepted by the significantly increased vegetation in the western portion of the Basin, captured in the other aquifers, or retained by some other phenomena. Our figures show recharge to the Valley Fill of about 13,000 acre-feet per year as opposed to the 8,000 acre-feet that you indicate. Essentially our recharge figure is based on the demand on the Valley Fill Aquifer (approximately 55,000 acre-feet in 1995) minus the depletion attributed to those demands (approximately 42,000 acre-feet in 1995). A check of the water levels and uses in the Basin seems to bear out those figures.

Withdrawal from the Valley Fill Aquifer does not equal depletion. Earlier drafts concentrated totally on depletion and did not discuss use. It appears that we have confused you and probably others, thus we will attempt to correct that in the final version of the Plan. If we overstate the rate of depletion as you indicate, then obviously "Mother Nature" is playing some form of trick on us with the declining water levels in wells throughout much of the Basin. The Plan is based on historical and projected trends. The gains or losses of a given year are of little use in developing projections, trends and programs.

We have looked at your table and have reviewed the material we received from you on other occasions referencing the computer model. What you have created is a wonderful step forward that should be useful in ground water management of the Basin's water resources in years to come. We agree with you totally on that fact. We realize and appreciate that there has been a tremendous amount of time and financial sacrifice by Entranosa to develop the model. We also realize a sensitivity analysis associated with its assumptions and input data by an independent third party with absolutely no stake in the outcome is required to validate it before anyone should use it in place of field measurements and data. This conservative approach is not intended as any sort of criticism of Entranosa or Balleau & Associates, but as the USGS recently found out in Albuquerque, data can be misread, assumptions misstated and mistakes made. We recognize the computer model as a decision aid, not a decision maker, which seeks to replicate reality, but the assumed assessments should never be confused with total reality. The computer does not make wet

water. Its projections are only as good as the data, judgment and understanding of those who have developed it and those who seek to use it.

Induced recharge, given what is occurring in the actual water level readings of much of the Basin, might indicate a much worse, rather than better situation. Until a comprehensive monitoring, metering and investigations programs is undertaken (hopefully tied to real time in a GIS environment) and the results show something that can be translated to "real water in the well", we will stick with our more conservative view of today and the future.

The plan provides a focus and a path to the future. As long as we have some form of citizen oversight of its execution there should be ample opportunity to adjust programs, projections and expectations based on new and emerging data. We do agree that the computer model can assist in that effort and hope to use it.

We could not agree more with your discussion about additional levels of bureaucracy and more rules, regulations and laws. Our whole premise for the implementation of this plan is that the programs must be developed and executed at the local level with funding which is placed in an Estancia Basin Water Resources Trust Fund to be used for the execution of the recommended programs. There is a very real need for some level of oversight and coordination that does not presently exist to ensure that funds are not wasted and that duplicate efforts are minimized. The Trust Fund, if established, should be overseen by a Board of Trustees and administered by an existing entity, probably an SWCD. The current Estancia Basin Water Planning Committee charter from the counties and makeup of non-paid citizen representatives of major Basin stakeholders with finite terms of service, with renewal approval up to their stakeholder, appears to us to be the best way to move forward utilizing the expertise gained over the past five years. The same body could serve as trustees of the Trust Fund or a second body created. We have used a volunteer staff to date and a few consultants. We probably could continue that way augmented by a consultant or contract hire for certain specific activities. We need to spend our scarce funding on the development and execution of programs, not on staff or bureaucracy.

We do not believe that providing additional resources and tools to the Office of the State Engineer would be useful for the Basin. The Office of the State Engineer performs the regulator function for the State of New Mexico and should not become directly involved in the operational

aspects of the Basin as envisioned by the Water plan. They need to function at their state level and support the local level. In any event they are so poorly staffed and funded that any resources provided to assist them with respect to the Estancia Basin would be immediately moved to their higher priority requirements, such as the Lower and Middle Rio Grande, the Pecos, and the San Juan Basin (Farmington and Aztec) to name just a few.

We agree with you that many of the policies affecting the current administration and management of the Basin are outmoded and have been overcome by events. However, we are required by the ISC Template to develop the Plan based in large part on what exists ("what is"), not what we would like it to be. We have suggested several rather significant changes. We suspect that if they are applied to the Estancia Basin as a "pilot effort" that some may be accepted.

While some of us may share your view that a sustainable water supply could be attainable earlier, we do not believe the operational and oversight apparatus is available today to cause that to happen. We do not share your view that a net withdrawal of 30,000 acre-feet per year is a sustainable posture for the Basin. If I have \$100 in a bank account and I withdraw the net sum of \$10 per year every year, irrespective of the hundreds or thousands of dollars I may run through the account, at the end of 10 years I'm out of money in the account. The same is true of our aquifers with respect to water. There are some who suggest that this has already happened. Again the monitoring, metering and investigations programs coupled with the use of your computer model should help us deal with these concerns in the years ahead. That of course will only occur if we have a Water Plan that focuses us on the future and the collective good of the Basin. We have applied to the New Mexico Interstate Stream Commission for some funding, seed money, to begin this effort.

Again, we very much appreciate your comments and suggestions and hope that we will be able to work together in the years to come to solve many of these questions and concerns, hopefully to the satisfaction of all of us. See you at the public meetings!

Sincerely,



Richard G. Spender

Chairman

Estancia Basin Water Planning Committee

RGS:dlt

November 12, 1998

Gavin Longmuir
P. O. Box 10
Stanley NM 87056
(505)-832-0259

Estancia Basin Water Planning Committee
P. O. Box 129
Mountainair NM 87036

Dear Sirs,

Draft Regional Water Plan - October 1998

I would like to congratulate the members of the Estancia Basin Water Planning Committee and your contractor, Jim Corbin, on the Draft Recommended Regional Water Plan. The following comments are intended in a constructive and supportive spirit.

1. Define a More Aggressive Goal.

The goal should be ultimately to balance water recharge and water withdrawals in the closed Estancia Basin. I understand that this can not be accomplished immediately, but the goal should be to reach a steady state with no further declines in the water table within (say) 10 - 20 years.

2. Promote the Need for Changes in Water Law.

Current water law and policies in New Mexico appear to have developed to allocate a recurring variable resource (surface water flows) among competing claimants. This is a seriously flawed paradigm for dealing with an essentially non-renewable resource, such as groundwater in a closed basin.

Put simply, the New Mexico water law which governs closed groundwater basins should be changed to reflect physical realities. I think that the success of any plan to deal with water in the Estancia Basin depends on supportive legislative action.

3. Inform Buyers.

A key part of any plan has to be ensuring that all new participants understand the finite nature of the Estancia Basin aquifer. Prospective purchasers of property in the Basin (and of water exported from it) should be informed in simple written language of that fact and its implications.

4. Fund the Plan through Royalties on Sellers of Water

As the Committee clearly stated, any successful Plan for the Estancia Basin will need money to buy back water rights, subsidize agricultural water conservation, etc. Fortunately, there is an obvious fair source of the required funds -- a royalty imposed on the sellers of New Mexico water.

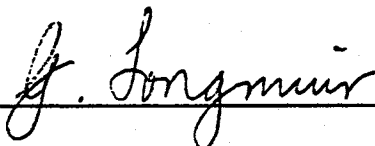
The water belongs to the State of New Mexico, i.e., to all of us. When the State leases other mineral rights (such as oil, gas, or coal) to individual citizens, the State properly claims a royalty as the actual owner of the resource. It is clearly improper for holders of water rights to sell water to third parties without sharing any of those revenues with the actual owners of the water.

The interesting analogy is with oil & gas practice, where the State allows extracted hydrocarbons to be used royalty-free on the lease, such as when extracted gas is used royalty-free to fuel the equipment which extracts & treats the gas. Royalties are due only on that portion of the gas which is sold to third parties.

I propose that the State impose a royalty or other imposition on sales of water to third parties. The rancher who uses his well to water his stock and the homeowner who uses water from her domestic well in her own house would automatically be exempt from this imposition. The only person who would pay this fee would be the individual water rights owner who sold water to a third party.

Revenues from royalties on water sales in the Estancia Basin could be shared between the State and the Special Groundwater Management Area, and used to fund implementation of the Plan.

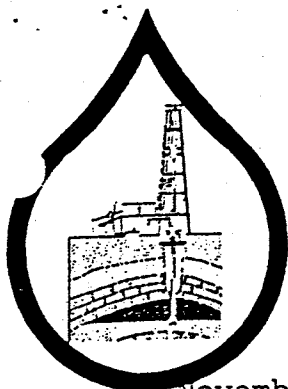
Yours sincerely,



Gavin Longmuir

Estancia Basin Water Planning Committee

Box 168 Estancia, New Mexico 87016



November 24, 1998

Mr. Gavin Longmuir
P. O. Box 10
Stanley, NM 87056

Re: Reponse to your letter, dated November 12, 1998,
regarding the draft Estancia Basin Regional Water Plan

Dear Mr. Longmuir,

The Estancia Basin Water Planning Committee very much appreciates your interest, comments, attendance and oral input at several of the public meetings. In addition, we appreciate the fact you have taken the time to attend several of our monthly meetings during the past few years. Your comments and suggestions show that your time was well spent. Your suggestions are well founded and are quite representative of the many constructive suggestions we've received from our fellow Basin residents.

Our initial goal was much more aggressive. We initially adopted Scenario #4 with a goal of an immediate sustainable water supply. After reviewing the water supply and demand realities as we understand them, we came to realize that such a goal was probably unattainable based on an economic, social, political, and technical feasibility analysis. Only if the vast amounts of water some attribute to the other aquifers is really present and can really be tapped to the degree necessary to provide water to those who currently get their water from the Valley Fill Aquifer can such an aggressive goal be attained.

If we achieve the levels of success with the Conservation Program that similar efforts in other portions of the country claim, particularly with respect to agricultural efficiencies, then we have a chance of attaining a sustainable Basin water supply situation in the next 40 year period. We also felt that the economic, social, political and cultural realities of the Basin dictated a slow, measured approach to a sustainable water supply in the Basin. After five years of wrestling with what water

Torrance County

Santa Fe County

Bernalillo County

"Coordinated water resource planning for the Estancia Underground Water Basin."

resource seems to be available, where it is, can it be used, and the quality of it, we have come to a general consensus that the best approach is the one we have recommended. We do understand your concern and desire to achieve a sustainable water supply posture more quickly and believe the plan moves us in that direction. If the opportunity to achieve a sustainable posture occurs earlier than projected, it will be seized.

Your comments about New Mexico Water Law are well spoken and we agree with them for the most part. The Water Plan attempts to deal with those concerns both at the state level and at the basin level. We believe that the designation of the Estancia Basin as a Special Ground Water Management Basin with policies that take into account the concerns of the Basin's residents and that support the State of New Mexico's (NMISC) mandate for a sustainable water supply as opposed to the current "mined basin" Office of the State Engineer policies will significantly help.

Of particular importance is the protection of existing declared water rights. A rural conservation program will not succeed unless everyone, but particularly ranchers and farmers, are protected from the current New Mexico policy of "use it or lose it" with respect to water rights. Further the continued declaration of new water rights in a basin where the water levels in most areas in the Basin are dropping and the yields of wells in most areas declining, appears very unwise to us.

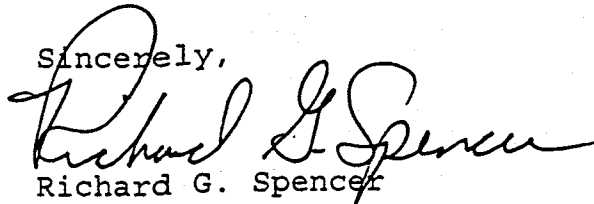
Finally, exportation of water from this Basin also appears to be unwise. There are other instances where water is being exported from one basin to another, and we recognize that in those cases exportation may be the right decision. In the Estancia Basin exportation appears to be a short term solution to an immediate water supply concern near the Basin that could have disastrous long term implications for the residents of the Basin as well as those being served outside of the Basin. The overwhelming response from Basin residents is that it be stopped, and we have recommended that in the Plan. Since that action is unlikely because of the state-wide precedent that it might set, we have suggested that the Basin be designated a Special Ground Water Management Basin to increase public scrutiny and review of any exportation efforts.

While we recognize and applaud your concern for potential buyers in and near the basin, we believe that this is a governmental function that can best be handled by the existing political and governmental institutions.

Your royalties suggestion is excellent and will be included in the Water Plan as a possible way to address third party use/sale of water and water rights. It may be that providers of water for domestic purposes within the Basin should receive the same consideration as farmers, ranchers and domestic households with wells. The political process will have to deal with that situation in some form as the Plan moves forward. We do very strongly believe and recommend that an Estancia Basin Water Resources Trust Fund must be established to fund Water Plan programs.

We hope that this letter is responsive to your comments and suggestions and hope to see you at the next round of public meetings from November 30 through December 3, 1998. Again, thank you very much for your interest and comments.

Sincerely,



Richard G. Spencer
Chairman

Estancia Basin Water Planning Committee

RGS:dlt



United States
Department of
Agriculture

Forest
Service

Cibola
National
Forest

Mountainair Ranger District
P.O. Box 69
Mountainair, NM 87036-0069
(505) 847-2990 FAX: 847-2238

File Code: 2500

Date: November 13, 1998

*
*
Richard Spencer
Natural Resources Conservation Officer
PO Box 129
Mountainair, New Mexico 87036

I have reviewed most of the DRAFT Estancia Basin Regional Water Plan that I received asking for comments by November 13, 1998.

I compliment the efforts that have gone into work of addressing the issue of water resources in the Estancia Basin.

As you are aware, the majority of the east slope of the Manzano Mountains drain into the basin and contribute to the watershed of this basin. Our watershed programs all focus on improving water quality and quantity, meeting state and federal standards.

Current uses and activities of the Manzano Mountains and the management of those uses and activities can have an impact on water resources. As you are aware we have been actively working at improving our management of roads, grazing, forest health, wildlife, wilderness, recreation and watershed.

As part of the community I hope that we are complementing what is being addressed in this plan. Through the management of the many uses in the Manzano Mountains I hope to be able to contribute to maintaining or improving the quality and quantity of water that flows from this mountain.

*



Caring for the Land and Serving People

Printed on Recycled Paper



I would like to express my concern with the thought of cloud seeding. Since I do not know much about this process I cannot elaborate, however the possible effects that this action could possibly have on the Mountains would be something that the Forest Service would like to explore.

I have attached a copy of the latest amendment of the Cibola National Forest Plan that addresses watershed management prescriptions in general. Probably the four most significant variables that would impact water resources, that we are working at addressing in the Manzanos, is the management of roads, trees, grazing and recreation.

If there are any questions feel free to contact me at 847-2990.

Frank R. Martinez
Frank R. Martinez
District Ranger

MANAGEMENT PRESCRIPTIONS
APPLICABLE TO ALL AREAS
(Continued)

<u>Decision Variables</u>	<u>Activities</u>	<u>Applicable Management Areas</u>	<u>Standard and Guidelines</u>
			<p><u>Plant Composition.</u> Maintain or provide 20 percent of woody plant composition in three or more riparian species or as appropriate for the site.</p> <p><u>Plant Structure.</u> Maintain or provide at least three age classes of riparian woody plants with at least 10 percent of the woody plant cover in the sprout seedling and sapling stages and 10 percent in the mature and overmature.</p> <p><u>Crown Cover.</u> Maintain or provide crown cover of both trees and shrubs that is at least 50 percent of natural levels considering unit reaches of about 2 miles in length.</p> <p><u>Ground Cover.</u> Maintain or provide ground cover and litter as appropriate for site and overstory conditions.</p> <p>Update water uses inventory. Maintain and protect existing water rights and file for additional water rights necessary to provide for all Forest water use needs.</p> <p>Promote the conservation and efficient use of water at all Forest water developments.</p>
		F01, F02 F05	<p>Plan and design projects or parts of projects, such as timber sales, specifically for soil and water resources improvement where watershed condition is unsatisfactory.</p>
		F03	<p>Water quality and soil monitoring will be done in key locations to aid in the identification and correction of resource problems.</p>

**MANAGEMENT PRESCRIPTIONS
APPLICABLE TO ALL AREAS
(Continued)**

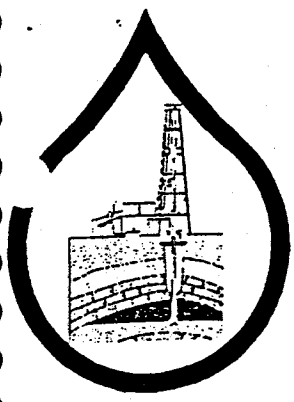
Decision Variables	Activities	Applicable Analysis Areas	Standards and Guidelines
			<p>These measures include seeding with appropriate species to establish adequate effective ground cover and the construction of control structures where needed to control runoff.</p> <p>Riparian areas in moderately high and high condition will be maintained or improved. Areas in low and moderately low condition will be treated. The anticipated result will be conditions similar to those set in the Regional Guide regarding riparian areas.</p> <p>Direct watershed improvements scheduled for Period 2 will be considered for implementation in Period 1 in addition to those scheduled for Period 1 as opportunities arise through special programs with funding or volunteer programs, and in conjunction with other activities such as K-V Projects on timber sales.</p> <p>Give preferential consideration to resources dependent on riparian areas over other resources when unresolvable conflicts among uses arise.</p> <p>Riparian areas should be managed toward meeting the following standards:</p> <p>a. Aquatic Resource:</p> <p><u>Shade.</u> Maintain or provide shading over perennial and intermittent water surfaces that is at least 80 percent of natural levels.</p> <p><u>Bank Cover.</u> Maintain or provide natural bank protection to at least 80 percent of natural levels. Give emphasis to the protection of stream bank stability provided by woody plant roots, particularly on outside banks of stream channel meanders.</p> <p><u>Streambed Sedimentation.</u> Composition of sand, silt, and clays within streambeds should not exceed 20 percent of natural levels.</p> <p>b. Vegetation Resource (where site is capable of supporting woody plants):</p>

**MANAGEMENT PRESCRIPTIONS
APPLICABLE TO ALL AREAS
(Continued)**

Decision Variables	Activities	Applicable Analysis Areas	Standards and Guidelines
230	K09	All	<p>Through the use of best management practices the adverse effect of planned activities will be mitigated and site productivity maintained. These practices are determined (after problem assessment, examination of alternatives and appropriate review by local or state agencies and public participation) to be the most effective practicable means of preventing or reducing the amount of pollutants generated by non-point sources to levels compatible with water quality goals. These practices are involved in activities affecting the forest and grassland resource and include:</p> <ol style="list-style-type: none"> 1. Install water control structures and/or interseed on poor and very poor condition ranges where revegetation potential is moderately high to high on slopes less than 40 percent. 2. Piling and terracing will be done on the contour. 3. Balance permitted use with capacity. 4. Restrict tractor skidding to areas that: 1) have less than 40 percent slope; 2) can be reforested; and 3) have volumes of at least 800 board feet per acre. 5. Requires cable systems for timber harvest for areas that: 1) have slopes greater than 40 percent; 2) can be reforested; and 3) have volumes of at least 3,000 board feet per acre. Design systems that take advantage of concave slopes and avoid convex slopes. 6. Construct or reconstruct roads to specifications that allow outslipping or water control structures at appropriate distances. Obliterate all temporary roads following activities. 7. Stream courses will be designated within timber sales to protect watershed values. This protection will include controls on skidding within riparian areas and along or across designated stream courses. 8. Skid trails and landings will be water barred, seeded, and closed following activities. 9. Mechanical site preparation should include appropriate measures to include dicing on the contour, periodic leave strips, and construction of periodic flow restrictions as needed. <p>Rehabilitation will be applied when needed to minimize loss of site productivity following activities or wildfire.</p>

**MANAGEMENT PRESCRIPTIONS
APPLICABLE TO ALL AREAS
(Continued)**

	Decision Variables	Activities	Applicable Analysis Areas	Standards and Guidelines
Fire Management	180	E06,E07,P11,P34	All except 1, 3	All activity created fuels which exceed 15 tons per acre will be considered for treatment to achieve a Fuel Model 12 or less. Treatment will consider other resource objectives and acceptable risk. Activity created fuels which are less than Fuel Model 12 may be treated to achieve resource objectives. All treatments will consider acceptable risk. An appropriate suppression strategy will be selected and implemented on all fires occurring on the Forest. The strategy selected will follow manual and supplement direction and will be documented on appropriate Cibola form. Develop fire management plans for the Forest so unplanned ignitions may be classified as prescribed fires when meeting prescribed burning prescriptions to meet pre-determined resource objectives.
	350	P16,P17	All	Submit burning plans to the State in compliance with air quality regulations. Conduct all burning projects when weather conditions minimize smoke impacts on air quality. Use prescribed fire to support resource management objectives.
	350	P01	All	Strengthen efforts to reduce the number of man-caused wildfires through news releases, contact with Forest visitors, and contacts with various organizations. Increase public awareness of the need to use fire as a management tool. Accomplish through news releases, brochures, audio visual programs and Forest speakers bureau.
Insect and Disease Control	180	P34, E03	All	Monitor and report insect and disease conditions on a continuing basis and initiate appropriate control methods in early stages of potential outbreaks when it is determined that allowing the condition to follow its natural course will result in unacceptable resource loss. When pesticides are used for pest control, project plans will contain appropriate and necessary monitoring procedures and mitigation measures.
Watershed	230	B32	All	Conduct terrestrial ecosystem inventories on 900,000 acres during period 1 to standards specified in Region 3 FSH 2509.14.
	230	FC2,225	All	Conduct watershed condition inventory and update water use inventories on all watersheds during periods 1 and 2.



Estancia Basin Water Planning Committee

Box 168 Estancia, New Mexico 87016

November 24, 1998

Mr. Frank R. Martinez
District Ranger
U. S. Forest Service
Mountainair Ranger District
P. O. Box 69
Mountainair, NM 87036-0069

Re: Response to your letter, dated November 13, 1998,
regarding the draft Estancia Basin Regional Water Plan.

Dear Frank,

The Estancia Basin Water Planning Committee very much appreciated your review of our Plan and the Watershed Management Plan you provided. Efforts like yours are a major element of the Water Plan that we hope to capitalize on through a basin-wide focused approach to water resources management. We do not desire to reinvent anything in our effort, funding is just too precious for that. We hope through a better coordinated effort to ensure complimentary use of people, dollars and expertise that will enable all of us to achieve a sustainable water resources posture in the Basin.

With your permission, we would like to include your Cibola National Forest Plan, Management Prescriptions (related to improving water quality and quantity), in the Appendix of our Plan and present the current terrain management efforts of the U. S. Forest Service in conjunction with the "land grants" and others as an example of how cooperation can help achieve the desired results of water conservation.

We certainly appreciate and probably share your concerns about "cloud seeding". Initially only a few of us felt that it might be worthy of consideration; however, as we checked further we found that several states, counties and water conservation districts have active programs, some for as long as 30 years. They swear by their programs indicating an increase in precipitation by as much as 10 to 20%. That

Torrance County

Santa Fe County

Bernalillo County

"Coordinated water resource planning for the Estancia Underground Water Basin."

is obviously quite attractive to an area with very slim prospects for new water. Most "cloud seeding" programs are located in the "Plains" (Texas, Oklahoma, the Dakotas, Nebraska and Kansas). However there are some in California with Monterrey County, California appearing to have terrain and vegetation similar to ours. They are totally dependent on precipitation and ground water like the Estancia Basin. It appears that an effort targeted at increasing the snow pack during the winter months would be the most useful with a secondary effort addressing the "monsoon season" if funding permits. You do need the right climatic conditions, specifically moisture laden air which we are in short supply of most of the year. Most programs use a seeding program from planes; however, our mountains afford us an opportunity to use ground based systems. Again Monterrey County has just started a similar effort as a cost saving effort. Most entities that we contacted indicated that they felt we could run a very satisfactory "pilot program" for about \$100,000 per year. It would appear a 5-year "pilot" program would provide enough data and experience on which to determine the feasibility of a long term program. Please understand that we are really in the very preliminary stages on this effort and would welcome any and all thoughts and assistance.

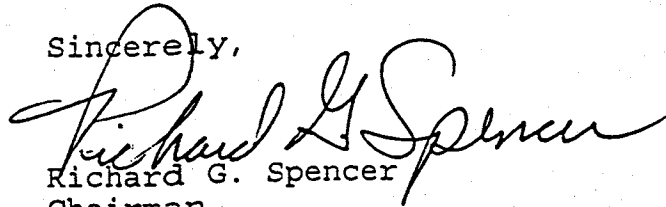
We have recommended a "pilot program" in the Plan so we can see what really works in the Estancia Basin. We would welcome the opportunity to discuss "partnering" with the U. S. Forest Service and other state and Federal agencies that might be interested. We believe that we will be able to develop funding and put together and execute a credible "pilot program". If the "pilot program" is successful we need an agency or entity to execute the program over time. The Forest Service would certainly appear to be an excellent candidate to assist in that effort.

We intend to hold a second round of public meetings from November 30 through December 3, 1998 to discuss how we've addressed the public comments received to date, and to brief the public on the final Regional Water Plan. Our intention is to present the Plan to the New Mexico Interstate Stream Commission on January 5, 1999. We believe we must get it in their hands in time for the next legislative session that starts in late January 1999.

Again thank you very much for your interest and very substantive input. I hope this letter is responsive to your comments, and that we can work several programs together. Vegetative and terrain modification are two in addition to

"cloud seeding" that would seem to be extremely good candidates. We hope to see you at one or more of the public meetings!

Sincerely,

A handwritten signature in cursive script that reads "Richard G. Spencer". The signature is written in dark ink and is positioned above the typed name.

Richard G. Spencer

Chairman

Estancia Basin Water Planning Committee

RGS:dlt



United States
Department of
Agriculture

Forest
Service

Cibola
National
Forest

Mountainair Ranger District
P.O. Box 69
Mountainair, NM 87036-0069
(505) 847-2990 FAX: 847-2238

File Code: 2500

Date: December 2, 1998

Mr. Richard Spencer, District Conservationist
Natural Resources Conservation Service
PO Box 129
Mountainair, NM 87036

Dear Richard:

I see no problem with including part, or making reference to, the Cibola National Forest Land Management Plan (FLMP) as amended in your report.

The Cibola National Forest is currently working towards evaluating the need for a revision or amending our current FLMP. This work is ongoing and I know that the Claunch Pinto SWCD and you have provided input during the scoping and comment periods. I will make sure that NRCS local office and Claunch Pinto SWCD are kept on our mailing list. I will add the Estancia Basin Water Planning Committee to our mailing list as well. Please let me know if you have any suggestions on who else to add to our mailing list.

I look forward to continue working on local issues as important as water.

Sincerely,

Frank R. Martinez
Frank R. Martinez

District Ranger



Caring for the Land and Serving People

Printed on Recycled Paper



Jerry D. Powers

HCR 69 BOX 181
MORIARTY, NM 87025
PHONE: (505) 838-2367
FAX: (505) 832-1834

COMMENTS ON THE ESTANCIA
BASIN RECOMMENDED REGIONAL WATER PLAN
November 11, 1998

Comments and concerns are as follows:

• **REGULATORY**

The report mentions, but does not address or attempt to resolve the tremendous conflicts between the provisions of this plan and state laws. The report makes recommendations that would violate state laws or if followed, would lead to farmers losing water rights (conserved water that could not be used as outlined in objective number four of the Conservation Plan would lead to loss of water rights). This conflict should be resolved before any further action on this plan because the public should know, and have input into the way this conflict is to be resolved. How the conflict is to be resolved (if it can be) is crucial to property owners since historical uses could be in jeopardy and traditional property rights that are essential to survival of farmers and agriculture could be lost.

Only one paragraph has been devoted to conflicts between the SEO regulations and the Interstate Stream Commission plans and regulations. In order for this plan to succeed it must delineate all conflicts between its' proposals with State laws and regulations and articulate the ways in which each conflict will be resolved.

• **ACCURACY AND AVAILIBLTY OF INFORMATION**

This plan ignores and contradicts known information regarding the basin's geohydrology, even so far as contradicting data from the "Shoemaker" report which was commissioned and paid for by this Committee. A few examples are:

The Shoemaker report (and the SEO) use a figure of approximately 50% depletion as a percentage of demand for agricultural irrigation. This plan assumes 75%.

The Shoemaker report estimated that the Glorieta Sandstone contains almost as much water as the Valley Fill (which would double the current scenario to 240 years of water). It is well documented that the Glorieta can pump high volumes of potable water (up to 1000 gallons per minute according to pump tests on my farm) yet this plan allows *nothing* for the Glorieta.

It is no wonder that the public favors eliminating exportation of water when exportation has been misrepresented to the public in its effects on the Basin. The plan treats exportation as an additional depletion of water, when in fact, the only water that the SEO allows to be exported is that portion of water that (formerly used in agriculture) would be consumed by the crops or evaporated off during irrigation. The net effect of exportation versus agriculture is exactly the same.

None of the appendices and reports that are quoted and referenced are attached. How can the public evaluate a plan without seeing the underlying data upon which the assumptions are based? A full set of all appendices should be attached and the comment period should be extended for a reasonable time period. Two weeks is woefully inadequate for a document of this size and scope.

• ECONOMIC IMPACTS-RURAL ECONOMY

The plan could have severe negative economic impacts on the community, if implemented as drafted. For example:

1. The plan does not address the need for economic development within the community and the large part that water use plays in the economic health of the local economies. There are no recommendations for a program to try to attract clean industries which may utilize water that is currently being used for high-loss uses, such as agricultural evaporation and transpiration, which could be re-injected into the aquifers, eliminating a source of loss and causing a net gain to the aquifer. Industries such as electronics manufacturing firms, which require quantities of clean water to produce electronic components, could be attracted to the Valley, which would "kill two birds with one stone" insofar as it would create jobs for our community and, at the same time, rather than paying subsidies to farmers to not use water rights or buying water rights with taxpayer money, which would be a negative impact on the community, such an industry could buy water rights with private funds (no cost to taxpayers), utilize the water in a efficient manner and re-inject it into the aquifer. This would save the portion that was normally evaporated or transpired. For example, an average plant would employ 5,000 people, utilize up to 5,000 acre-feet of water, 4,000 of which would normally be lost to the atmosphere through evaporation, and then would re-inject nearly all 5,000 acre-feet annually, creating a substantial gain against aquifer depletion, a gain in the economy and job market for the area, all at no cost to taxpayers.
2. The plan leaves out some areas which have worked admirably in other parts of the country to conserve water and, at the same time, preserve agriculture. An example is the Imperial Valley in California, where recently irrigation districts have allowed farmers to conserve water and sell either all or some ratio of conserved water to metropolitan water districts to supplement and stabilize their incomes. The way this could function in the

Estancia Valley is that farmers could implement conservation programs, such as planting low water loss crops, switching to more efficient irrigation systems, etc., and then utilize their rights to sell conserved water, or some ratio of conserved water, to domestic utility companies. Such a program would have many benefits to Estancia Basin residents and the agricultural community:

- a. Wholesale water supplies sold to utilities in the Estancia Valley average \$1.45 per 1,000 gallons, or \$471.25 per acre-foot per year. By first conserving water, and then transferring its use to serve domestic needs would supplement the income of the agricultural community, thereby ensuring survival of agriculture in the Estancia Valley, and
- b. Would fulfill the demand for domestic use that is projected to occur within the planning horizon (approximately 5,000 acre-feet), and reduce depletion of the aquifer from the drilling and use of 72-12-1 wells (domestic wells that automatically establish new water rights) and would significantly enhance depletion reductions, as per the goals of the plan.

Depletion reduction by this method could save nearly 5,000 acre-feet annually, which is based on projected domestic demand of 5,000 acre-feet annually by 2040, the fact that the State Engineer limits pumping of agricultural waters by 50% if converted to domestic use, and the fact that the domestic water would then re-enter and recharge the aquifer by either septic tank discharge, constructed wetlands effluent, or reinjection of centralized wastewater systems. This plan does not take into account the depletion reductions that are available through use of existing technological advances in wastewater treatment and re-injection technologies.

It appears to me that the plan in its conceptual essence is severely flawed. The plan proposes to establish another layer of government which could operate to the detriment of all residents i.e.: a huge and unnecessary tax burden) and crippled economy, especially property rights owners in the Valley. The major reason for not accepting the plan on its face is that the plan itself estimates that doing nothing could cost residents up to \$100 million, while the plan will cost at least \$82 million. The goal of the plan is to limit average annual reservoir depletions by 30,000 acre-feet annually. Rather than create another level of bureaucracy that could potentially cause economic harm to the community as well as potential for loss of agricultural production due to increasing the regulatory burden on the agricultural industry, it would be more beneficial to meet this goal as follows:

Objective (Program)	Annual Depletion Reduction Goal	Cost to Taxpayers
Attract clean industry (re injection of used water)	5,000 acre-feet	\$-0-
Sale of conserved agricultural water to domestic supplies, reducing use of new domestic wells (72-12-1)	5,000 acre-feet	\$-0-
EBWP Committee Proposed Conservation Program	15,500 acre-feet	\$10,050,000.00
Purchase Water Rights (Banking) @ \$1,250/acre-foot	4,500 acre-feet	\$5,625,000.00
Total	30,000 acre-feet	\$15,675,000.00
Total	30,000 acre-feet	\$15,675,000.00

This sort of plan would accomplish the same goals while protecting the economic integrity and future for the current residents of the Estancia Valley and their children.

I am not writing this letter in my official capacity as president of the Landowners Association (although I believe that the membership would concur) because the inadequate response period did not allow time to hold membership meetings to discuss the matter in depth. I believe that public hearings with an ongoing commentary period sufficient to deal with a document of this scope and import to all residents is necessary.

Jerry Powers
 appropriate for response



Estancia Basin Water Planning Committee

Box 168 Estancia, New Mexico 87016

November 24, 1998

Mr. Jerry D. Powers
HCR 69, Box 181
Moriarty, NM 87035

Re: Response to your letter, dated November 12, 1998,
regarding the draft Estancia Basin Regional Water Plan

Dear Mr. Powers,

The Estancia Basin Water Planning Committee very much appreciates your time, effort and willingness to provide comments and constructive suggestions. We are basically in agreement in several areas that by the tone of your letter you seem to feel we are not. We wish you had been able to attend one of the public meetings, but the fact that you read some items almost opposite of our intention is useful to us. We are rewriting some sections so that, hopefully our comprehensive communication level will increase.

The mandate from the New Mexico Interstate Stream Commission was to base the Plan on the existing laws and administrative policies that are currently used to manage the Basin. They did allow us the latitude of recommending changes to laws and policies and pointing out inconsistencies and concerns. You are quite right in your comment that the law and administration with respect to water rights must be changed before any useful Conservation Program can be conducted in a rural area. Until the rights of current water right holders are protected and New Mexico's "use it or lose it" philosophy changes there will be and can be no real conservation of water in rural areas. We suggest some thoughts about resolving the conflict, but really believe that the resolution which affects the entire state, not just our Basin, should be left to the legislature and the Office of the State Engineer. "Freezing water rights", even though you did not like that recommendation, is about the only way you can begin to attack this concern. If you continue to declare more and more water rights you can never begin to stabilize the use of water and ultimately get to a posture where only what is needed is used. Further, if you do not freeze water rights there is nothing to prevent a major

Torrance County

Santa Fe County

Bernalillo County

"Coordinated water resource planning for the Estancia Underground Water Basin."

industry from declaring all the water they need and then pumping that water right out from under you and the other existing water right holders in the Basin.

The one paragraph devoted to the conflict between the policies used to administer the Basin by the Office of the State Engineer and the policies mandated to develop a water plan by the New Mexico Interstate Stream Commission appear to us to be about right. Most people do not appreciate being attacked by others, particularly those charged with the extremely difficult task of developing and administering policies and laws. We all like some room to begin to work a problem and develop a way to alleviate concerns. We have tried to provide that amount of leeway in the Plan so that those charged with the specific development and execution of programs could and would do so.

The data in the Plan was taken directly from the Shomaker report. The conclusions and interpretation of that data are our own. The final report will be properly footnoted so that you can see where we obtained our facts and figures. As to the 50% versus 75%, we used Table 49, page 100 of the Shomaker Report for our diversion figure for irrigated agriculture (54,440 acre-feet) and Table 59, page 105 of the Shomaker Report for our depletion figure (41,204 acre-feet). That just happens to work out to about 75%, but it could have been any figure depending on that area of the state and the factors used by the Office of the State Engineer and others and the actual water level readings in wells over time. Suspect your 50% figure comes from diversion versus consumptive use as administratively defined by the State Engineer. That is a different issue from actual depletion based on actual water use.

The Shomaker Report indicates that large amounts of water may be found in the Glorieta Sandstone and other aquifers. His report also indicates that it may be difficult to obtain that water which may not be readily available. You indicate a very good source of water on your farm. Others that have wells in the Glorieta indicate that their flow has decreased dramatically in the past few years. Still others who conducted large scale gas and oil exploration indicate that the Glorieta is not as extensive as many of the geohydrologists believe. We know a lot about the Valley Fill, but did not feel that we knew enough about the Glorieta to base the Plan on claims that may not be valid. We have included fairly aggressive monitoring, metering and investigations programs to hopefully deal with our concerns and those of many of your fellow Basin Residents.

Finally there are many residents taking water from the Valley Fill that may not have the money to place a new well

in the underlying Glorieta, assuming that it underlies their property. As you and others use the Glorieta more and more, assuming the water is readily available, it is clear that you are either intercepting water that may have moved in to the Valley Fill, or if the State Engineer is correct you are pulling water out of the Valley Fill, de-watering it. Either way the Valley Fill Aquifer is losing water and those that rely on it, even if they have senior water rights, are being placed in jeopardy. That may be inevitable, and your use of your well in the Glorieta is certainly valid; but, the end result over time may be wells drying up, people moving on, communities withering, and growth reversing. That is potentially a more significant concern than you indicate in your letter and one that adds a considerable cost to any use of underlying aquifers or aquifers where use may intercept flow to the Valley Fill that you do not account for in your presentation. Our review of the "status quo", Scenario #1, indicated a cost of \$100M to \$200M. The "drill it, declare it, use it" and possibly "move on" manifest destiny approach is what we are doing today and which could be continued under the "mined basin" philosophy administered by the State Engineer.

We do not believe that we have misrepresented the situation in the slightest just as we would not suggest that you are doing so. Honest people can and do have honest disagreements. There are few undisputed facts other than falling water levels and more and more dry and abandoned wells. We really believe that is the crux of the public's concern, not any presentation by us. If we were trying to "railroad" something through you would not see the type of presentation we have offered for consideration by the public. We do not believe there is a disaster today. We do believe, after five years of wrestling with water issues and each other, there is a concern today that could turn into a future disaster if we do not proactively plan and address our water resource future. The Plan is a suggested path to the future that hopefully will focus the debate on what should be done and how it should be done.

The several hundred pages, probably thousand or more of appendices and reports, do not add enough to the real issues in our opinion to warrant the prohibitive cost of mass publication. In fact we believe people would be so inundated with detail that the really important concepts might be missed or become more confusing. The Shomaker Report, The East Mountain Wastewater Study and Water Study, the Stephens Report, several USGS reports over time, the New Mexico Geological Society report on the Basin, the various available Water Plans (Texas, California, Utah) to name a few, the reports on the successes of various vegetative and terrain management efforts as well as various cloud

seeding efforts are all public and will be included in the Final Plan in some form. You are welcome to examine them at your indepth leasure. They do not significantly assist in the present discussion where we wanted to focus on the main concerns and issues. There is a lot of data and a lot of opinions, some well-founded, some not. There are very few answers. Continued argument over the data is the reason the State of New Mexico and all of the basins (regions) in New Mexico continue to fall farther and farther behind those in our neighboring states.

Economic development is critical as you point out. It is also a political decision best left to the elected leaders of our Basin. It is the critical decision for them and we recognize that fact. We understand your "clean industry" presentation. As we have already indicated, we do not believe there is any "free lunch". An argument could just as easily be made for some form of heavy use, dirty industry that would employ thousands of people and bring in hundreds of millions of dollars to the Basin's economy and tax base for a 20 to 50 year period, then goes away when the water is all used up or fouled beyond use. Without some way to make a living and create the wealth that provides funds to sustain the Basin, we all leave. We do agree with you on that premise. We have left the land use, zoning and economic leadership of the Basin to those charged with that. How they use the Plan and how they fund and execute it is ultimately their decision and responsibility. Hopefully, we have supplied one of many tools to be used for the task.

We did not leave out the water district/wastewater district possibilities as you suggest. In fact there were some lengthy discussions in some of the public hearings on that concept based on our presentation in the Plan. We have looked at the Imperial Valley and several others in California as well as several in Utah, Texas and other parts of the Plains. All of the recommended programs come from ongoing programs that have worked somewhere else. Our goals are based on a conservative application of those programs to our Basin. Those that dislike bureaucracy have indicated that the form of district you suggest is not what they want. It does appear, as it always does, that whether one likes or dislikes bureaucracy is somewhat dependent on who the bureaucrats are.

We agree with the concept of water right holders benefiting from their efforts to conserve "real water". We have included water rights "banking" and water rights "buyout" programs that will in essence provide funding for existing holders of recognized water rights. While the intent of both programs is to target and reduce water rights in production we have also targeted any presently existing

water rights for a portion of the effort. Funds to buy, or in the "banking program, to lease water rights (probably for a minimum of 20 to 30 years, maybe 40 years) comes from the Basin Trust Fund. That Fund would hopefully garner monies from a variety of sources. One source could be royalties on various uses of water involving third parties that has been suggested by several people and has been summarized in one of the letters we received. Specific details need to be developed through the legislative, political and financial processes.

The sale and export of water is certainly a major factor of this discussion. People felt in 1995 and 1996 and have reiterated in 1998 that this is their Number 1 concern. They do not want water exported when their wells are drying up. If water rights are frozen at their present level and water rights holders protected (i.e. no "use it or lose it"), then the value of water rights and possibly water certainly could increase. As long as there are several hundred thousand acre-feet of water rights that might theoretically be declared (block system) and potentially sold and or moved to better well locations for use and/or export, you and the other holders of present water rights are at risk. There is also the fact that water levels are dropping in wells in spite of the "oceans of water arguments". Every new water right potentially increases that drop in water level irrespective of where it is used, if you believe the view that all of the aquifers are interconnected and that the Basin is just one big "bathtub".

The Committee unanimously agrees with you concerning the issues of government, rules, regulations, policies and laws. We do not want another layer any more than you do. That is the reason to keep development and execution of specific recommended Water Plan programs in the hands of already existing local entities like the counties and municipalities, SWCD's, Farm Bureau and existing local entities of the state and federal government. We do believe there needs to be a dedicated Estancia Basin Water Resources Trust Fund administered by a non-paid citizen Board of Directors that can only be used for water resource related activities. Obviously the development of a dedicated funding stream causes more concern and discussion.

We also believe that the Committee in its present, role provides a useful planning, coordination, budgeting and oversight function at the local level. We really believe that ultimately someone will provide that function and that a local stake holder entity that provides a basin-wide overview answerable to the counties, SWCD's, farming, and ranching community, municipalities, local developers, utilities, and the public at large is better than a few

people in Santa Fe with a political, bureaucratic agenda. A state wide overview is going to be provided by the existing state agencies in any event and should be, but the real need to be sure reasonable things happen is at the local level. That local level oversight needs to cut across county lines to be sure of basin wide effort. As one participant at one of the public meetings put it "local oversight at the local level, answerable to the local people, is preferable to any other, and given events of the past 20 years in the water resource arena, preferable to no oversight."

The next round of public meetings runs from November 30 through December 3, 1998. We intend to forward the Final Plan to the New Mexico Interstate Stream Commission on January 5, 1999. We have received some very helpful suggestions about how to say what we need to say. You have made several that we will try to work in to the Plan as we put it in its final form. We do not intend to continue in the New Mexico tradition of debating this forever. We know that the State of New Mexico is about ready to begin to develop a "top down" regional approach that we suspect may truncate several uncompleted regional efforts. Once control is taken completely at the State or Federal level we would suggest that our ability to influence what happens will be severely limited. We will continue to evaluate any public comments received in written form or offered on the record at our Committee Meeting of December 14, 1998. We will include those comments as part of the Plan and address them as such in written form. Comments not included in the Final Plan as recommended programs or discussion will be included in the Appendix for all to see and review with our written discussion as to why they were not included.

The Final Plan is a compromise. It also is not engraved in stone. It is a dynamic, working model that could very well be used as a prototype for the state. It is not perfect, but all of us together can make it better. We believe it is a good product, addresses the water resource needs of the Basin, and is worthy of support by all of us. We hope we can count on you for that support. Again, thank you very much for your excellent comments and suggestions. We hope our discussion has been responsive to your concerns and hope to see you at the next round of public meetings.

Sincerely,


Richard G. Spence
Chairman
Estancia Basin Water Planning Committee

RGS:dlt

Tucker Farms
P.O. Box 1047
Estancia, NM 87016
505.384-5490 voice, 505.384-5441 fax
vktucker@highfiber.com email

November 7, 1998

To: EBWBC
P.O. Box 129
Mountainair, NM 87036

From: Kelly Tucker

Re: Ground Water in the Estancia Basin

Dear Sirs,

I would like to express my wish that water in the Estancia Basin remain in the Estancia Basin and not be exported outside the Basin.

My family has a small farm in this water area with 223 acres of irrigation rights. If water is removed from this area, I fear that it will adversely affect the water table. It is important that water remain available for farming in this area.

Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Kelly Tucker". The signature is written in black ink and is positioned above the typed name.

Kelly Tucker



Estancia Basin Water Planning Committee

Box 168 Estancia, New Mexico 87016

November 24, 1998

Ms. Kelly Tucker
Tucker Farms
P. O. Box 1047
Estancia, NM 87016

Re: Response to your letter, dated November 7, 1998,
regarding the draft Estancia Basin Regional Water Plan

Dear Ms. Tucker,

The Estancia Basin Water Planning Committee very much appreciated your letter of November 7, 1998 and for expressing your concerns over exportation of water from the Estancia Basin and the continued availability of water in the Basin for agricultural purposes.

Exportation of water from the Estancia Basin was the overwhelming Number 1 concern of Basin residents during the public meetings of 1995 and 1996 and remained the Number 1 concern during the just completed round of public meetings. It is clear that most of the Basin's residents do not favor exportation of water from the Basin.

Current state laws, Office of the State Engineer policies, and ongoing practices throughout New Mexico allow exportation of water from one basin to another basin, particularly when public welfare seems best served by that exportation. Exportation currently occurs from several basins in New Mexico, to include the Estancia Basin. Rather than attempt to change state law and policies affecting other basins, we believe that the Estancia Basin should be designated by all levels of government as a Special Groundwater Management Basin with policies adopted by the counties and Office of the State Engineer that prohibit exportation of water or at the very least discourage exportation of water through an intense public scrutiny and approval process. We also have recommended that exported water or water rights be subjected to some form of significant impact fee where funds garnered are placed in an

Torrance County

Santa Fe County

Bernalillo County

"Coordinated water resource planning for the Estancia Underground Water Basin."

Estancia Basin Water Trust Fund to be used only for water resource related activities.

Agriculture has been the main stay of this Basin's economy for many years and remains one of the major economic factors in the Basin today. The rural life style and open spaces associated with agriculture have helped to create a way of life and an area that has become increasingly attractive to those who wish to escape the problems and concerns of city life. The inevitable result has been a change from agriculture to suburban living and more of a service oriented economy in some portions of the Basin. With irrigated agriculture as the major user of water in the Basin today and into the projected future, it is important to stress agricultural efficiency. To that end, we have recommended that the Farm Bureau and Soil and Water Conservation Districts lead an effort to review successful irrigated agricultural efficiency programs locally and in other parts of the country and to develop and implement programs that will be helpful in minimizing to the extent possible agricultural demands on the aquifer(s). We have recommended several potential programs based on successful efforts elsewhere in the country, and envision "pilot programs" to see what really can work in the Basin. We would be remiss if we did not point out that water rights currently possessed by individuals and organizations need to be protected (i.e. the "use it or lose it" policies and laws of New Mexico must be changed) if any irrigated agricultural efficiency or conservation programs are to be even remotely successful. We have also included recommended programs to deal with the water rights issues in the Basin.

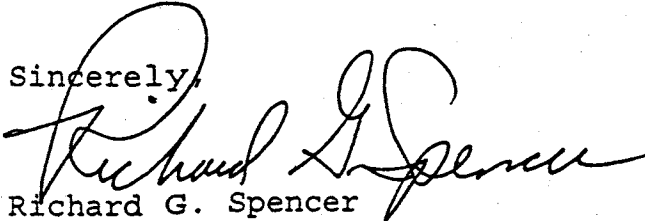
Local initiative, local responsibility and local action are the bedrock on which this Water Plan is based. Without a strong, viable local effort, useful implementation of the Water Plan will not occur, and it will become just another unused plan. While many wells are drying up and have dried up, we still have time to act in a careful reasoned way to begin to move from a "mining of the water resource situation and policy" to the sustainable water resource for the future mandated by the State of New Mexico (New Mexico Interstate Stream Commission).

We plan to hold another set of public meetings beginning November 30, 1998 through December 3, 1998 to lay out for the Basin residents what we received in the way of input and how we've incorporated and handled that input. Our intent is to provide the Final Water Plan to the New Mexico Interstate Stream Commission on January 5, 1999 for their review and acceptance bringing to a close this phase of a five year citizen effort. It is important that the Basin

have the Water Plan in place before the next legislative session which begins in late January 1999 for funding purposes.

Again, thank you very much for your interest and input. We hope we have been responsive to your concerns and hope to see you at one or more of the upcoming public meetings.

Sincerely,



Richard G. Spencer
Chairman
Estancia Basin Water Planning Committee

RGS:dlt

Below is a letter I have sent to the Estancia Citizen. I send you a copy as feedback for the meeting I attended. If you have any questions, please feel free to contact me.

To the Estancia Basin Water Planning Committee:

After attending one of the Estancia Basin Regional Water Planning Public Participation Meetings and reading Carl Hertel's article in Conservation Corner in the November 13, 1998 issue of the Citizen, I felt called upon to share my thoughts and feelings about the draft of the Estancia Basin Recommended Regional Water Plan.

While I greatly appreciate the Committee's desire to generate public input, I don't feel the way in which they did it was very effective. When you have 30 people in a room all facing the front of the room where the "experts" are presenting a plan they've already created, then I don't feel very included in the process. I would have liked to hear less from the "experts" and more from everyone else in the room. The question and answer format after a long presentation only generates a limited response from any audience. I would like to have seen the chairs set in a circle or in small groups so that everyone had a real opportunity to speak, their words recorded, and shared with the rest of the group.

It is clear that this issue of water use is a touchy subject, and we do not really address the needs of all the stakeholders by having a small number of people create a plan that very few have ownership in.

The meeting I attended felt like a farce. While the committee said the plan wasn't a "done deal," it sure felt like it to me. I knew various people in the room and I also knew that they probably wouldn't agree on which "tools" we should use to make a truly sustainable water plan. For that matter, they probably don't agree with the current one that only buys us a couple hundred more years at great expense to those living in the Estancia Basin. I also know that these same people have a strong commitment to the health of this watershed. Unfortunately, that commitment, their integrity, knowledge, and creativity has not been tapped by this planning process.

As for the plan itself, I was stunned to see cloudseeding as an option. It seems to me that if we look at the way the water is cycling on the ground's surface, we would be looking at an awful lot of flooding and erosion. Until we get a healthy water cycle, it seems like we would be spending money to create more problems for us if we seeded the clouds and didn't address the issue of an ineffective water cycle.

If the committee and the government officials who are vesting the power in this committee really want public input, then they need to give the public the opportunity to truly create the plan, not just comment on it, ask questions about, or express their concerns about water use. The committee cannot create an effective water plan without public involvement in the actual creation of the plan.

I'm sure the committee has collected a lot of valuable and helpful data that would aid the citizens in making that plan. If having the public create the plan seems impossible, then you either have little faith in the citizens of the

Estancia Valley or you don't think it is important enough to get that kind of involvement to explore the possibilities.

I have talked with government officials and citizens in communities throughout the Western states dealing with the same issues of resource management at a community level. By exploring innovative ideas to engage all the stakeholders in that community, they have created community-wide plans that work.

I hope we don't settle for a sustainable water use plan that isn't even sustainable because we can do a lot better than that.

Ann Adams
80A013
Tajique, NM 87016
384-3442



Estancia Basin Water Planning Committee

Box 168 Estancia, New Mexico 87016

November 25, 1998

Ms. Ann Adams
80A013
Tajique, NM 87016

RE: Reponse to your letter undated, regarding the draft
Estancia Basin Regional Water Plan.

Dear Ms. Adams,

The Estancia Basin Water Planning Committee appreciates receiving your written comments even though they were received 11 days after the deadline. Frankly, your motives would be a lot less suspect had you availed yourself of the opportunity to express your feelings in open forum instead of writing a letter to the newspaper. It is interesting to note how we have gone to so much effort and expense to set-up public participation meetings, have invited the world to come, furnished information and educational materials, succeeded in getting you to attend, and you felt the need to write the newspaper rather than to participate. The meeting you attended was for us to report back with a draft plan created from suggestions gathered at all the public meetings held in 1995 and 1996 and from consultant information gathered since 1996. Clearly we did not do a good job of explaining the purpose of the meeting, and I apologize for that.

We would point out that all of us are private, concerned citizens of the Estancia Basin. We live here, raise our families here, have our jobs and businesses here, and intend on being here past tomorrow. We have been appointed by and represent the major stakeholders and citizens at large of the Basin. We serve on the Estancia Basin Water Planning Committee as volunteers (with no pay) as a public service effort requiring a considerable cost of time, effort, energy, and personal money. Your mis-characterization of us is quite disturbing and misleading. If we really wanted to create a "farce" public meeting as you suggest, we would not have sent out over 16,000 invitations plus newspaper

Torrance County

Santa Fe County

Bernalillo County

"Coordinated water resource planning for the Estancia Underground Water Basin."

articles, lined up 4 separate comfortable and accessible meeting places, hired a professional meeting facilitator, and spent hours of our lives to inform you of our progress. In fact, if we were trying to do what you indicate, there would have never been any meetings.

We disagree with you concerning the value of the professional consultants who are assisting us. "Experts" are useful and very necessary partners in our water planning effort. Worldwide exposure, experience, and technical expertise are invaluable tools in developing a meaningful water plan.

Clearly you were so stunned to see "cloud seeding" as an option that you must not have heard the rest of the discussion or have read the plan. We do not know whether or not "cloud seeding" will work in our area, thus the indication of a "pilot program". The most critical factor for "cloud seeding" is air laden with moisture, something that is in very short supply in New Mexico. Further we indicated that in the several programs run in several other locations (Texas, California, the Dakotas, Kansas, Oklahoma, and New Mexico) the gain was usually 10% to 20% in precipitation in the target area. Given our annual precipitation of about 14 inches, mostly snow pack, 10% would be another 1.4 inches and 20% would be another 2.8 inches. We doubt that flooding and massive erosion would result, but are sensitive to those concerns. Any "pilot program" that is developed will certainly use the 20 to 30 years experience that has been garnered by other organizations who have run these types of efforts and involve the residents of the target areas in a "meaningful" way. As an example Monterrey County, California runs an extensive "cloud seeding" effort with the knowledge and backing of their local community on terrain far more rugged and susceptible to erosion than the Manzanos.

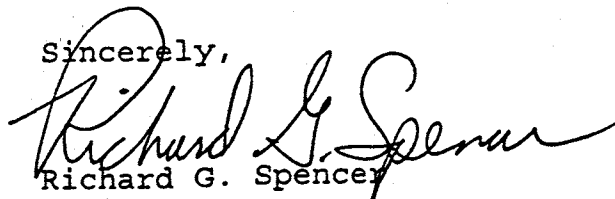
We can provide you with volumes of articles, meeting notices and other attempts to gain public involvement. It has taken five years to get to the point where a reasonable plan can be presented to the New Mexico Interstate Stream Commission. We welcome your thoughts and input and are genuinely sorry that you felt slighted. Frankly though, we feel a bit slighted by how you have handled your criticism. We hope to see you at the next meeting in Tajique on November 30, 1998. We will share your letter and your feelings about us, the plan and our process and provide you any opportunity you desire to express yourself, just as you had the last time. However, we do not intend to go back and reinvent the process each time a new player decided to come to a meeting for the first time. New Mexico and the Estancia Basin are both in

dire trouble with respect to water resources. We need to lay out a reasonable, dynamic path that begins to move us down the road of responsible water resources management.

We understand that you do not agree with the process. We are the public every bit as much as you are. You are welcome, have been welcome for 5 years and remain welcome to attend our monthly meetings and to make your feelings known and to give us the benefit of your extensive experience in water resources management and public involvement. At our regular meeting, you will definitely be in a small group, set in a circle, and you can share anything you feel lead to voice, but because of the diversity of background and experience of the non-experts (citizens) involved in this effort, you will be challenged to produce a better product than they have produced. Gather your "community-wide plans that work" and be at our next meeting December 14th at the Torrance County Courthouse.

Again, thank you very much for your input. Reasonable, honest people with the best of intentions can disagree about how to best do things. There is nothing wrong with that.

Sincerely,



Richard G. Spence
Chairman
Estancia Basin Water Planning Committee

RGS:dlt

Paul Davis
P.O. Box 1736
Tijeras, New Mexico 87059

November 24, 1998

Richard Spencer
Estancia Basin Water Committee
P.O. Box 129
Estancia, New Mexico 87036

Dear Mr. Spencer:

I am writing in response to your request for public input on the Draft Estancia Basin Recommended Regional Water Plan. I had intended to respond sooner but I was awaiting the background report by Mr. Corbin. Mr. Corbin had promised to send me the report at the last meeting in Tajiue. As yet, I still have not received the report. Therefore, I contacted Lucy Moore and asked if comments were still being considered and she assured me they were. Without the background report I will be unable to provide you with detailed comments so in the mean time I will comment only on the draft plan as documented and presented at the Tajiue meeting.

My major concern is first of all that the committee failed to meet their stated goal. That is they have failed to come up with a plan for sustainable water use as required by the New Mexico Interstate Stream Commission. In other words, the Committee's selected alternative still results in the basin running out of water. Of nearly equal importance, the committee has ignored the major sources of direct pollution to our water supplies. As it turns out these problems (lack of a plan for sustainable development and ignoring water quality issues) are really the same. That is, the committee has determined that impacts of farming and ranching would be accepted without question, or worse, ignored. And finally, the committee has defined and implemented a public process based on informing the public of their predetermined decisions instead of honestly seeking input that could change the plan itself.

The simple facts are not arguable. First according to your reports, agriculture accounts for 97% of water depletion (Figure 7, page 6). Second, regardless of how much recharge we hope the basin is getting, the water levels are dropping at an alarming rate. Finally, we are applying a tremendous amount of pollutants (fertilizers and pesticides) to the ground and in the case of cattle grazing in the mountains we are applying pollutants directly to our water supplies and recharge areas. One would think that at least one of your proposed alternatives would have seriously considered the cessation or at least drastic reduction of these activities. Instead you focused your attention on the "new comers" and the amount of water they use and the potential for their septic tanks to leak.

So now where do we go from here? I strongly recommend that you start over by: 1) reviewing and editing the original hydrogeologic report to remove the bias that was

added/edited into it; 2) initiate a public process that encourages input especially with regard to defining alternatives and; 3) analyze the resulting alternatives in a fair, unbiased, and quantitative manner. As I have stated to you on numerous occasions (verbally and in writing), I am willing to help you in this very important endeavor.

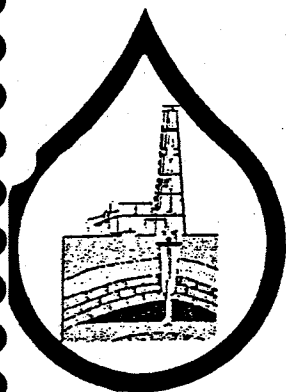
Sincerely,


Paul A. Davis

PS - I will send you detailed comments on the analysis of alternatives as soon as you provide me with the reports you promised.

Cc: Lucy Moore

Jim Corbin



Estancia Basin Water Planning Committee

Box 168 Estancia, New Mexico 87016

November 27, 1998

Mr. Paul Davis
P. O. Box 1736
Tijeras, NM 87059

RE: Response to your letter, dated November 4, 1998,
regarding the Draft Estancia Basin Regional Water Plan

Dear Mr. Davis,

Excellent letter of the type that we need. Focus is on
major issues with well-stated thoughts and concerns.

Mr. Corbin indicated that he though you were going to send a
letter specifying areas where you wanted more detail. He
has volumes of material which he has used, some of which is
proprietary. Because of our desire to move forward quickly
now that we have consensus on the Committee to do so, we
have asked him to assist us in finalizing the report and
then go back and finish his backup material and add it to
the Appendix. Mr. Corbin also indicated that he felt the
misunderstanding was his fault in that he may not have
explained that fully to you. He has indicated that he will
call you to discuss where you can obtain much of the same
material he has if you so desire. He did suggest that the
next phase of the effort where the specific programs are
developed by the action agencies and entities that are going
to execute them would be a valuable area where your talents
and expertise could be well used.

The cost, time and depletion reduction goals (savings) are
based on "orders of magnitude" analyses taken from other
ongoing water plans and efforts like the High Plains effort
in Texas and the Texas and Utah Water Plans, as examples.
We have taken their claims and suggestions and attempted to
apply them to the Estancia Basin to develop our programs.
The next phase utilizing sponsors/action elements who
develop, gain funding and execute given portions of the Plan
involve the detail you seek. Hopefully you will become a
part of the process in the areas of interest to you. The

Torrance County

Santa Fe County

Bernalillo County

"Coordinated water resource planning for the Estancia Underground Water Basin."

Water Plan is not the end of the effort, it is the start. There are many long miles yet to be traveled before on-the-ground success begins to occur.

The Committee agrees fully with your comment about the "stated goal", and our initial goals that we evaluated all envisioned a sustainable water supply within 40 years. However, given the mined basin and block declaration of water rights policies used by the State to administer the Basin, we felt that any such assertion would have been less than prudent, bordering on dishonest. As long as New Mexico utilizes a "use it or lose it" philosophy with respect to water and water rights, there is no chance that a rural area will do less unless the water rights holders are protected. Conservation programs that minimize pumping and maximize reuse will not succeed in the face of this ongoing state policy. Further if anyone can essentially obtain more water through a declaration and pump the water you save, there is no incentive to save water. These circumstances exist today and today is where we are starting.

You are correct that irrigated agriculture is the major user of water in the Basin. We would respectfully point out that the major portion of the depletion reductions (savings) come from irrigated agriculture through water rights banking and buy-back programs, agricultural efficiencies, and metering and monitoring programs. Attempting to "force" the plan on any group or individual in the Basin leads to continued polarization and guarantees failure.

Those who do not share your views, and there are many in the Basin, react to the Plan in exactly the same way you do, with suspicion and concern and a call for going back to the start again. The plan is a consensus direction document based on actions that took five years of data collections and analysis, enhanced with and molded by extensive public input, interactions, and debate for the Committee to make recommendations. We need to move forward with what we can grudgingly accept and build some trust between groups through shared success, while agreeing to disagree on some substantive issues. There will be ample opportunity to amend and adjust the individual Action Plans developed in the future. If we try for a 100% solution or 100% agreement now, we will never move forward. That has been the problem throughout New Mexico and is the reason we are the only state in this area of the country without a clearly articulated state plan or supporting regional plans.

As an example, you cite severe pollution concerns with respect to agriculture and ranching without specifying the incident(s) on which you base your claim in the Basin. We

are all familiar with cases in other states and areas, but there are no records that we could find that substantiate your statement with respect to the Estancia Basin. We have included a Monitoring program that is intended to collect data and function as a trip-wire warning system since many of us are concerned, just as you are. There are large groups of people who disagree even with this rather modest effort, and vehemently disagree with your contention. Again we need to move towards consensus, concentrate on the real water resource problems, and be willing to sacrifice some time, energy, and dollars to ensure the future of this Basin. We appreciate your volunteer attitude in offering your assistance as an individual or potentially as a representative of SAIC. We need your background, your expertise, and your additional informed view point.

Excellent letter with well-stated concerns and thoughts. We can assure you that the issues you raise have been hotly debated during the past five years. We are as concerned as you about some portions of the Shomaker Report, but we did not nor will we dictate what a consultant should say. We ask for their report to be an honest presentation of water resource related facts, and we feel we have a useful compilation of known assessment data. We must build on the foundation we have, work on the flaws, explore the "black holes" and improve the products as we go.

Hope this letter is responsive to your concerns and that you will support our effort to move a "good enough", dynamic Regional Water Plan forward so that we can seek to resolve questions and concerns with real answers, not theory. See you at our next round of public meetings in Tajique!

Sincerely,



Richard G. Spencer
Chairman
Estancia Basin Water Planning Committee

RGS:dlt

Brackett's Bluff Ranch

1178 Laurel Pl. NE

Albuquerque, NM 87122

505-797-2644 (Office) 505-328-4417 (Cell)

Fax: 505-797-2646

December 3, 1998

Estancia Basin Water Planning Committee

Attn: Richard Spencer

I wish to thank you and your committee for providing me the opportunity to participate, if only peripherally, in your planning process. The results of your work are good and the progress you have made is commendable. Now that this phase is completed, your efforts are even more important. The work is just beginning. I look forward to your ongoing success in implementing the plan you have generated.

I would like to add the following comments for your review :

I. REGIONAL WATER AND SEWERAGE DISTRICT

It is time to begin thinking about the longer term management structure for a governing body that will implement the water plan that is being generated. I would like to suggest that a Management District be established that will encompass the entire Estancia Basin and that will have both the tools and the authority to manage all aspects of water and sewerage. This will include the taxing authority to provide funds for development of an infrastructure. The district should be governed by a board which is constituted in a way similar to the current Water Planning Committee. This board will govern the RWSD, determine its policies, plan for a regional infrastructure, provide funds for management and construction of facilities, through its taxing authority, and provide a public water system and a regional sewerage treatment system.

There are many models for such a district. The one that I am most familiar with is the Metropolitan Sanitary District of Greater Chicago (MSD). This district was established to provide water to the city of Chicago and to the surrounding suburbs. It has taxing authority and is governed by an elected board. The MSD appropriates funds in a budgetary process for the management of the entire system of public water supply and water treatment. This includes collection and distribution piping systems, treatment facilities, and monitoring. The MSD has grown to include a huge infrastructure and also a large bureaucracy of employees.

The MSD is an independent governmental body at a governing level of authority similar to the Cook County Board. It is separate from the City of Chicago, as well, and operates within its own sphere of authority without interference from other governmental bodies except for the State of Illinois' oversight in the area of taxing authority. MSD has bonding authority as well as taxing authority.

Estancia Basin Water Planning Committee

Page 2

December 3, 1998

II. The most productive method for conserving water over the long term is through metering and monitoring. By merely knowing our actual usage, we can better appreciate the role of conservation. This goal probably needs a higher priority than it is being given in relation to the other planning goals. Additionally, in order to manage the basin's water supply, it is imperative to understand water flow within the basin. The by product of metering and monitoring is data collection. For planning to proceed effectively, there must be a resource of "hard" data. Without such data, there will be no way to measure the success or failure of our efforts. This data will provide other information that is essential to constructing a planning model. The more data that can be generated the better we can manage our water resources in the future.

III. Management and control of the water resources must be done at the local level in order to be successful. The essence of successful government is its responsiveness to the community it governs.

IV. It would be a mistake to imprint this water plan and its authority upon one of the SWCD's. Whatever form that this new governing body takes, it must be an independent body. In fact, it would make more sense to incorporate the SWSD's into this body - not imprint its goals upon some other body.

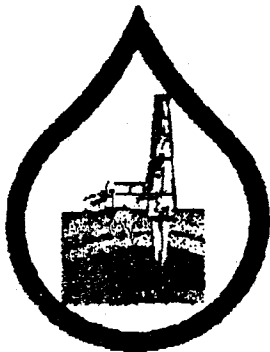
V. There is a strong need for a centralized sewerage treatment system for the major population centers within the basin.

Hopefully, these comments will be useful. Please call on me if you feel there is a contribution I can make to your work.

Sincerely,



Richard (Dick) Brackett



Estancia Basin Water Planning Committee

Box 168 Estancia, New Mexico 87016

December 9, 1998

Mr. Richard (Dick) Brackett
Brackett's Bluff Ranch
1178 Laurel Place NE
Albuquerque, NM 87122

RE: Response to your letter, dated December 3, 1998,
regarding the Draft Estancia Basin Regional Water Plan

Dear Mr. Brackett,

The Estancia Basin Water Planning Committee (EBWPC) appreciates very much your interest, attendance at many of our monthly Committee meetings, efforts and contributions to our effort both past and present, and the constructive comments and suggestions presented in your letter of December 3, 1998.

We are familiar with major water and sewer districts such as the one you referenced. Our consultant, Mr. Corbin, has worked closely with several similar entities in the past and just turned down a General Manager position with one of the major Los Angeles, California districts that serves several million people. He is quick to point out that Los Angeles would not exist without the type of district you discuss in your letter; however, he is equally quick to point out that he believes we should try a less aggressive approach first.

We agree with him, particularly in view of the opinions voiced in the public meetings and in some of the other letters that we have received. Most people in the West dislike and distrust any level of government or bureaucracy. It is apparent that those who are comfortable with the "status quo" might use the formation of a water and sewer district of almost 2,400 square miles as a reason to stop any pro-active effort on the Plan. We do believe that we should try to cause the existing governmental and quasi-governmental entities to step up to the challenge - first. If they fail to do so and the water resource situation worsens, then it will probably take a citizen sponsored

Torrance County

Santa Fe County

Bernalillo County

"Coordinated water resource planning for the Estancia Underground Water Basin."

effort through some form of referendum to achieve a workable solution.

We are looking into the formation of the type of district you suggest. In New Mexico it will take legislative action and the approval of the Governor, or it would require the coordinated efforts of all three (five) county governments. Neither of those scenarios are likely to occur today, and it appears the residents of the Basin would support a less centralized local approach, at least for the initial effort. While we all can see the wisdom of addressing this issue now before we have a complete and total disaster, there are very influential people and entities that still do not believe there is a problem or concern.

We feel that the Committee, or a body as an oversight and coordinating body to keep everyone focused on the Plan with administrative support provided by some already in place duly constituted governmental entity, is the right initial step. There is no intent to have a Soil and Water Conservation District shoulder the Committee's load. The intent is for one of them to provide the necessary administrative support and take the lead with some of the water conservation demonstration projects. It appears that the local county government is already fully committed and that the additional commitment of resources necessary to support the Committee in the next phase would not be possible. We do envision a cooperative effort by the various governmental and quasi-governmental entities, the local farm bureau, the various local utilities, local stakeholder organizations, and the already existing local, state and federal entities. The Committee would provide some level of oversight, coordination and encouragement. If a Water Trust Fund is established with dedicated funding sources, the Committee might oversee that as well. Many of the details and success of this coordinated resource management program would need to be worked out over time with "willing, dedicated" participants.

Based on the public input we received from the various public meetings, letters and other discussions with Basin residents, it is our opinion that failure to enact the Plan in a pro-active manner by the existing Basin entities will result in the type of district you suggest either through a citizen referendum or imposed by the State or Federal government. That has happened before in New Mexico. The now defunct Metropolitan Water Board of Santa Fe was a federally driven entity that lasted almost 20 years.

We agree totally with your comments about metering and monitoring and have stressed them more aggressively in the

revised Final Plan. We would point out that the key to their success is protection of the existing water rights. New Mexico's "use it or lose it" policy works directly against pro-active, intelligent conservation efforts in the largely rural areas of New Mexico. That policy coupled with the "mined basin" and "block declaration of new water rights" works against metering and monitoring. Given those policies, residents indicate that they would love to support metering and monitoring, but feel it would be foolhardy to trust the State. They cite such recent examples as the State offering water rights holders the minimum of either what they hold or what they use, whichever is less, in some of the ongoing adjudications.

We totally agree with you that a local effort is the only way to proceed! Because of your continued involvement in the process and understanding of our proposed plan, we take your comments to suggest that we have been responsive to community needs and have achieved an element of success. We have worked very hard to determine local citizen's water resource issues and concerns, workable conservation ideas, and public welfare perceptions. We appreciate your extra effort to expand our outreach program to include many of the key basin residents. A continued information/education program will be the foundation of future actions.

We also agree with you with respect to some form of centralized sewage collection and treatment in the developing and more developed areas of the Basin. Localized treatment systems that either are utilized to recharge the aquifers or reuse the treated effluent must become a part of the Basin's future. The opportunity for treatment of septic tank effluent is present as well as a first step into many already developed areas.

The Estancia Basin Water Planning Committee appreciates your positive, constructive comments, help and continued support. We are not at the end of the "adventure", but at the beginning. Thank you very much!

Sincerely,

Richard G. Spencer
Chairman
Estancia Basin Water Planning Committee

RGS:dlt

Date: 10/16/98

Name: John Jones, Entramosa

Type: Business

Reason: Water quantity and quality

Assisted by: Richard Spencer

Fund ID: CF1

-----Comment-----

Mr. Jones was seeking information on the Public Hearing we will be conducting gathering input on Phase II of the EBWP. I gave him an outline of our Public Participation Plan including particulars on meeting dates, times, and places. He will be attending the meetings.

Date: 10/16/98

Name: Edel, E. Mtn. Telegraph

Type: Business

Reason: Water quantity and quality

Assisted by: Richard Spencer

Fund ID: CF1

-----Comment-----

Edel called concerning EBWP advertise of Public Meetings. The Telegraph put the wrong location for the Meeting. Corrections will be made.

Date: 10/20/98

Name: Chuck Godoc

Type: Individual

Reason: Water quantity and quality

Assisted by: Dierdre L. Tarr

Fund ID: CF1

-----Comment-----

Mr. Godoc called to see where he could get a copy of the EBWPC's Draft Water Plan for the Estancia Basin. I gave him the locations in the Moriarty area where he could get a copy of the plan.

Date: 10/20/98

Name: Rick Uberbacker

Type: Individual

Reason: Water quantity and quality

Assisted by: Dierdre L. Tarr

Fund ID: CF1

-----Comment-----

R. Uberbacker called to ask questions about the EBWPC's Draft Water Plan for the Estancia Basin. I explained the Draft Plan was in several locations in the Moriarty area and he should be able to get a copy from one of the locations. His address is: HCR 81, #278E, Moriarty, NM 87035

Date: 10/21/98

Type: Individual

Name: Mike Pogue

Reason: Water quantity and quality

Assisted by: Dierdre L. Tarr

Fund ID: CF1

-----Comment-----

Mr. Pogue is a business owner in the Moriarty area. He wanted to know how to get a copy of the Draft Water Plan for the Estancia Basin. I gave him the locations in the Moriarty area and he said he would get a copy of the plan. His address is 501 E. Rt. 66, Moriarty, NM 87035 Ph. 505-832-4234.

Date: 10/29/98

Type: Individual

Name: Mrs. Cleaber

Reason: Water quantity and quality

Assisted by: Richard Spencer

Fund ID: CF1

-----Comment-----

Mrs. Cleaber will not be able to attend the EBWP public meeting in Moriarty tonight. She wanted info. on: Water drawdown, recharge, development, water planning, public participation, and history of our EBWPC.

Date: 10/30/98

Type: Individual

Name: Justin

Reason: Conservation information

Assisted by: Richard Spencer

Fund ID: CF1

-----Comment-----

The Moriarty C of C had given him my number to call for info. concerning public participation advertisement. Since he is in the Moriarty area, I gave him info to contact E. Mtn. Telegraph.

Date: 11/02/98

Name: Engersol, Kim

Type: Individual

Reason: Water quantity and quality

Assisted by: Richard Spencer

Fund ID: CF1

-----Comment-----

Kim wanted information on EBWP. I gave her info. as to where she could get the report (14 locations). She is interested in purchasing property and moving the the Est. Basin.

Date: 11/02/98

Name: DeJayue, Kay

Type: Individual

Reason: Water quantity and quality

Assisted by: Richard Spencer

Fund ID: CF1

-----Comment-----

She was not able to attend the meeting in Moriarty for the EBWP. She needed information. I referred her to the locations where the Draft Plan is available.

Date: 11/05/98

Name: Lincoln, Pat

Type: Individual

Reason: Water quantity and quality

Assisted by: Richard Spencer

Fund ID: CF1

-----Comment-----

Pat is working on a workshop and chairs a sub-committee for Terrance Co. P&Z. They are challenged with rezoning the AP-10 and CP Zones. Pat needed to touch base on the EBWP, and request that I be involved in their planning process on 11/17 & 12/1. I will make the 12/1 meeting possibly the 11/17 mtg.

Date: 11/09/98

Name: Powers, Jerry

Type: Individual

Reason: Water quantity and quality

Assisted by: Richard Spencer

Fund ID: CF1

-----Comment-----

Jerry was not able to make our public meetings for the EBWPC. He wanted an update on Phase II. He also requested a copy of the report. I explained where he could get a copy in Moriarty or Edgewood.

Date: 11/09/98

Name: Dan Sandoval

Type: Individual

Reason: Water quantity and quality

Assisted by: Richard Spencer

Fund ID: CF1

-----Comment-----

D. Sandoval is from the McIntosh area. He was concerned about losing water rights. He was referred to Moriarty and Edgewood area to get copy of the Draft Water Plan for the Estancia Basin.

Date: 11/09/98

Type: Individual

Name: Ted Jones

Reason: Conservation information

Assisted by: Richard Spencer

Fund ID: CF1

-----Comment-----
Ted and Mary are going to begin working on a grant to secure funds for additional well plugging to support the EBWP effort. I estimated the need for a minimum of 150 wells at \$500 ave. cost/well. We discussed a cost/share program, requesting a continuing grant, and no. of wells to plug/yr. A cost/share program was probably out due to the need for grant and then go for a continuation later. I can only do approx. 10 wells/yr. We need to request funds for a Technician to work the project. Decided to shoot for a 6 mo. window of employment (3 mo. admin & I&E, 3mo. plugging) We discussed potential funders to include all companies.

Date: 11/13/98

Type: Individual

Name: Powers, Jerry

Reason: Water quantity and quality

Assisted by: Richard Spencer

Fund ID: CF1

-----Comment-----
Jerry has been interested in the EBWP for a while. He was unable to attend our public meetings and wants to submit written comments. He wanted to drop them off at the Coop in Moriarty, but I suggested that he FAX them to me directly to ensure that we would address them.

Date: 11/10/98

Type: Individual

Name: Dan Sandoval

Reason: Water quantity and quality

Assisted by: Dierdre L. Tarr

Fund ID: CF1

-----Comment-----
Dan Sandoval called back today to ask how to get a copy of the EBWPC Draft Water Plan mailed to him. He gave me his address in Albuquerque to mail a copy of the plan. He said he would put the \$15 in mail today. His address is 1709 Zena Lona NE, Albuquerque, NM 87112. A copy of the plan was mailed priority mail on 11/10/98.

Date: 11/16/98

Type: Individual

Name: Dawn Young

Reason: Water quantity and quality

Assisted by: Dierdre L. Tarr

Fund ID: CF1

-----Comment-----

Dawn Young called to let the EBWPC know she supports what they are working on with the water plan. She said her neighbor's well had gone dry last year and her water table had dropped in her well. She had not been able to attend the public meetings because she has five children. She will be writing a letter to the EBWPC with the above information.

Date: 11/17/98

Type: Individual

Name: Lucy Moore

Reason: Water quantity and quality

Assisted by: Dierdre L. Tarr

Fund ID: CF1

-----Comment-----

Lucy called to ask me to let Richard Spencer know Bill Williams had called her on Friday, November 13th, asking if the comment time on the Draft Water Plan could be extended so he and some other people could send in writing comments. She offered to take the comments over the telephone so they would be in the comment period and he could then send the comments in writing. He declined saying he would send his comments to Richard by the end of the week of November 20th. She explained he might not receive a written comment back and he said he understood this.

Date: 11/18/98

Type: Individual

Name: Hull, Florence

Reason: Water quantity and quality

Assisted by: Richard Spencer

Fund ID: CF1

-----Comment-----

Florence Hull called concerning EBWP. She had a great concern that there were too many subdivisions being approved in the East Mtn. area. She wanted to know if Sandia Park was in the EB. I told her it wasn't. She supported our planning effort and again stated, "It is terrible that they are doing to NM with subdivisions. When they use all the water our investment in our land and homes will be lost." She felt she were "smart" to plan for the future concerning water resources.