

SUMMARY REPORT
of
WATER RESOURCES SEMINAR
(1st Semester 1974 - 75)

Discussions of the Planning Objectives
for the Idaho State Water Plan

by

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(University of Idaho)

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ABSTRACT

This report is a summary of the discussions that took place in an interdisciplinary graduate seminar that was conducted on the campus of the University of Idaho during the first semester of 1974-75. The topic was a review and analysis of the objectives specified by the Idaho Water Resource Board to be followed as a policy in the preparation of an Idaho Water Plan. The first six presentations were from state and federal agency leaders expressing their opinion and reactions to the objectives. Oral presentations followed by the graduate students, after which they submitted brief written comments expressing their own thoughts, ideas gained from reading and reactions to questions raised during the student presentation. This proved to be an outstanding educational endeavor that brought numerous viewpoints forth in a quiet and objective atmosphere of inquiry. Brief statements of the important comments brought forth are summarized by the authors to reflect the important findings that should merit the attention of those who participated and the consideration of agencies concerned with water resource planning in the state and region.

INTRODUCTION

Origin of Topic

In March, 1974 the Idaho Water Resource Board adopted a set of objectives expressing the water resource policy to be followed in the preparation of an Idaho Water Plan. This was in compliance with a constitutional amendment giving the Board the power to formulate and implement a state water plan for optimum development of water resources in the public interest. The objectives were published in June 1974 under the title "THE OBJECTIVES - Part I of the State Water Plan". These objectives have now been widely distributed and it was considered that a review and analysis in a graduate seminar would serve to educate both students and faculty while at the same time provide a chance for expression of public reaction to the objectives from one segment of society. Hopefully, it has been approached in an atmosphere of freedom of expression and with an openness that constitutes a worthwhile exposure of the contents of the objectives and provides a scrutiny that is called for in all public planning.

Roster of the Seminar Students

The seminar was composed of a group of graduate students from various professional fields of study on campus. The enrollment and the field of study of the students are indicated below:

<u>Name</u>	<u>Academic Field of Study</u>
Mian Bagh Ali	Agricultural Economics
William Clark Bailey	Agricultural Economics
Robert Lewllyn Brown	Forest Recreation

<u>Name</u>	<u>Academic Field of Study</u>
Steven Fred Elle	Fisheries
Leroy Fredrick Heitz	Civil Engineering
David Lewis King	Agricultural Engineering
Robert Rudolph Klant	Fisheries
Douglas Anth Naccarato	Agricultural Economics
Garth David Newton	Civil Engineering
Paul Thomas Sekulich	Fisheries
Stewart Elliot Stanton	Electrical Engineering
Russel Frank Thurow	Fisheries
Kyung Hak Yoo	Agricultural Engineering

The course was organized so that the six guest participants from state and federal agencies made presentations on each of the first six weeks of the class meetings. Following this, each week two students took up the seminar time in discussing particular objectives as published in the Objectives - Part I of the State Water Plan. Each student had a copy of the objectives plus a copy of the Interim Water Plan publication of the Idaho Water Resource Board. The editors of this report, as faculty in charge, were in attendance throughout the seminar and occasionally other graduate students and faculty attended. Attempts were made to bring out the issues in as much depth as possible.

Presentations by Guest Speakers

The guest participants were as follows:

<u>Name</u>	<u>Agency</u>
C. Stephen Allred	Idaho Dept. of Water Resources
Henry Stewart	PNW River Basins Commission
J. Allen Isaacson	USFS, Coeur d'Alene Nat'l Forest
Henry Moran	Idaho Dept. of Health & Welfare
Monte Richards	Idaho Dept. of Fish & Game
William Matthews	U. S. Bureau of Land Management

Mr. Allred opened the seminar and discussed how the objectives were developed. He emphasized the approach, and that it represented a sanctioned action by the Board that was charged with coming up with a water plan for Idaho.

Henry Stewart, a member of the technical staff of the Pacific Northwest River Basins Commission who is assigned to follow the particular activities of water planning in Idaho, presented the viewpoint of a federal-state regional entity as represented by the Pacific Northwest River Basins Commission. In general he was very complimentary and gave the impression that Idaho had been a leader in state efforts in planning. He liked the way it was broken down and was sympathetic to the problem of state-federal rights problems.

Mr. Isaacson, representing the U. S. Forest Service, was pleased to participate and pointed out the extensive areas in the state that are under Forest Service management. During his presentation the problem of reserved rights for water was brought up. He pointed to the need to define the instream water needs, but acknowledged the lack of time and often the lack of adequate tools to define those needs. He stressed the importance of the watershed in the entire

hydrologic process.

Henry Moran of the Idaho Department of Health and Welfare outlined how water quality standards had evolved and pointed to the fact that Idaho had not completely qualified for regulatory function for water quality control. The problem of non-point source pollution was stressed as a difficult matter to measure. There appeared to be a slight lack of close linkage in the planning function that is concerned with water quality control.

Mr. Richards of the Idaho Department of Fish and Game was strong in his plea for more emphasis for fish and wildlife habitat protection and enhancement. He did not like the concept mentioned in the Objectives relative to mitigation. He stressed the fact that many resources of habitat or wildlife could not be replaced. His attitude seems to speak out for a closer role in the establishing of goals and identifying alternatives as planning progresses in contrast to past opportunities to comment after the plan was put forth. He spoke very favorably about a trend toward more concern from the State Water Board and the staff toward a sensitivity for the environmental concerns.

Director Matthews of the U. S. Bureau of Land Management addressed the problem of the desire to develop federal land for irrigation. He did not seem to hold a different philosophy than the Board on trying to develop land to meet the state's historical share of food and fiber production. The problem of acreage limitations that are in force on such programs as desert land entries was discussed. Mentioned was the backlog of entries and the interest at the present time that exists

in the private sector of developing public lands. Mr Matthews pointed to the many different public land laws and policies that complicate the problem of land development. A new organic act for administering Bureau of Land Management has been under consideration that hopefully would help.

TOPIC PRESENTATION OF STUDENT PARTICIPANTS

In order to present the information in a coherent and logical order the objectives as stated in the State Water Board publication are repeated and then selected important comments are reported after the quotation of the objective statement.

Beneficial and Efficient Use of Water

"The policy of the Idaho Water Resource Board is to follow a broader definition of the term "beneficial use of water" to include all water uses, both consumptive and nonconsumptive (for example stream resource maintenance flows) and to seek implementation of those water resource projects and programs which provide for this definition through efficient water use practices."

Student and faculty comment was generally favorable and recognized that the objective was a step forward from the early record of development in the state and a rather narrow interpretation of beneficial use. Student comment pointed out that really nowhere was either "beneficial" or "efficiency" defined in the objective statement or in the discussion that followed in the text. The particular student discussing this pointed out that it might be wise to divide the objective into two separate objectives, one that speaks to beneficial use and a second that speaks to efficient use. He would contend efficiency should be based on highest and best use as measured in

terms of environmental, economic and social impact. The real question he pointed out is that at a given time the rating of importance of the three impacts is not necessarily equal. He argued for a freer market expression for water by providing for easier transfer of water rights. To reach a higher efficiency the student recommended the following:

1) Improving state water rights records

This could be done by providing that all water rights not recorded in five years from a designated date would lose this right.

2) Simplification of record transfer

To insure the unhampered transfer of water rights, laws forbidding the transfer should be repealed and clarification made of laws which tend to obscure the rights of water rights holders to allow transfers to be made to higher and better use.

All of this was qualified with a consideration that proper compensation be made when existing rights are changed or are acquired for higher purpose uses.

Electric Energy

"The Idaho Water Resource Board adopts as a planning objective a reduction in the reliance upon imported electric power. To achieve this objective, the state water resource policy is to promote and encourage those projects and programs which provide for the development of new electrical energy and more efficient use of existing energy sources."

Student reaction here centered on whether it is really necessary or wise for the State of Idaho to be energy sufficient. If the three aspects of environmental, economic and social impact were

more favorable to the importing of energy it was questioned whether the policy as stated should be accepted. No real justification and rationale was presented in the Board publication to support the policy. The student discussing this topic indicated not enough emphasis was placed on hydropower and the role it will play in meeting peaking requirements. It was mentioned in the discussion but not elaborated on to any extent. The student presentation did give some interesting facts on the changing nature of peaking power as it is projected to occur in the northwest.

Erosion and Sedimentation

"The policy of the Idaho Water Resource Board is to insure that projects and programs adequately consider their effects with regard to erosion and deposition of soil."

Surprisingly this was chosen and addressed by more students than any other topic. A common comment was that there was not enough emphasis or expressed concern for erosion control on existing water development projects, nor for erosion and sedimentation evaluation. One student pointed out that there was little mention in the text of the publication that discussed the role of water quality standards as now established by law. One student was concerned with the wording in the discussion portion of the text with regard to setting priorities for alternatives for rehabilitation of lands and waters that suffer erosion and sediment damage. He questioned the failure to mention other agencies that have legal responsibility. Some of the class felt the responsibility of the Idaho Water Resource Board should be broadened to include more land planning guidance since water

is so much the dominant force in the erosion process.

A concern was expressed that no real measure is available for expressing erosion. Some discussion centered around methods for measuring erosion and erosion damage. It was contended that often the so-called universal erosion equations do not apply in mountainous and semi-arid locations within our state. A contention brought up was the need to define some acceptable level of erosion and water quality conditions that can and should be met, recognizing that erosion is a natural process that will continue despite man's efforts. One student addressed particularly the economic aspect of erosion and sediment control. Discussion pointed to the wisdom of defining an acceptable level and pointed to the need to have economic information of the measures that could be taken to meet the acceptable condition. It was stressed that we need to strike a balance of acceptable erosion based on cost and benefit analysis including productivity criteria.

Fish and Wildlife

"The policy of the Idaho Water Resource Board is to give equal consideration to the needs of fish and wildlife in any project or program designed to promote the conservation, development and optimum use of the state's water resources. The Board recognizes that fish and wildlife are important elements of the states' economy and quality of life and will recommend stream maintenance flows in the Basin Reports."

The student analysis of this was critical of the part that the objective did not adequately provide for protection and enhancement of fish and wildlife resources. He contended that reading it gave the impression of support for water development projects. It was brought out that provision should be made for a more active role of

the Idaho Fish and Game Department in evaluation of other water uses on fish and wildlife, in cooperation with the Idaho Water Resource Board. Also brought out was the need to include public involvement in the proposed projects and programs. Fishery students expressed a desire for a policy that would include support for formation of a tri-state Columbia River anadromous fish council to aid in improving fish passage and proper regulation of that aspect of the fishery.

Fish-farming (Aquaculture)

"The policy of the Idaho Water Resource Board is to support continued growth of the aquaculture industry."

Student discussion centered on the need to be more specific in the objective statement so that it clearly supports both commercial production and for conservation fishery production to sustain the sports fishery in the state. Data and arguments were put forth to show the need to stock fish in the waters of the state.

The presentation pointed out the problem that efficient use of water based on maximum production of fish may be adverse to the quality of fish produced both for commercial use and especially for conservation purposes. One comment was that there was no mention of using existing water courses and impoundments to produce fish. There was obvious agreement from the group that the fish farm industry will expand and that the Board is right in giving emphasis to aquaculture as a policy matter.

Flood Damage Reduction

"The Idaho Water Resource Board adopts as a planning objective the preference of management over structural alternatives in reducing or preventing flood damages."

Here the student agreed that management should be stressed, but felt that the text following the objectives should point out that economic evaluation of structural measures should be compared with management methods. Thus the student favored economic comparison, and indicated that as he read it, the objective appeared to give more or less blanket vote in favor of flood plain management. Another point brought out as being worth consideration by the Board was a stated policy favoring standardization of zoning laws wherever possible. The student commended the Board on the policy of favoring improved operation of existing facilities, but indicated implementation would not be easy. His recommendation was that of program of educating operators of privately owned and district controlled reservoirs to better meet the needs of flood control was necessary. A further observation was that no mention was made of flood insurance in the stated Board policy.

Food and Fiber (Agriculture)

"The policy of the Idaho Water Resource Board is to seek an orderly growth of agricultural production in the state at a rate sufficient to maintain the state's current share of the national and international market."

The student tended to agree with this objective as stated except that he questioned using the limit of food and fiber production as the present share of international market. He spoke in favor of a production limit more restrained by environmental aesthetic nature of the state. There was general agreement in the stressing of increased production from existing lands through better management of the land and water resource. Discussion pointed out the federal

programs that have been available to increase production of food and fiber. The lack of mention of the relation of these programs may have been an oversight in the supporting writeup of this objective. It was also pointed out during the discussion that "fiber" covers the timber resource and no mention appears obvious in relation to the important relationship between timber and watersheds as an important element in water resources of the state.

Interbasin Water Transfer

"The Idaho Water Resource Board adopts as a planning objective, opposition to interstate transfer and diversion of water from Idaho."

The student considering this objective did not believe adequate attention was given to intra-state interbasin transfers and questioned whether water flowing through the state could be restrained in use or reservation without the involvement of other states through which the water flows. Strong arguments were put forth to support the concept of opposition to export, based mainly on the lack of knowledge of the social costs. There was an expression of hope that the northwest states could arrive at a joint resolution on water transfers in the future. A Brief review was presented of some of the past schemes for water transfers to acquaint the group with the reason the topic has been featured as an objective.

Recreation

"The policy of the Idaho Water Resource Board is to support those projects and programs which are designed to protect and enhance recreational opportunities in Idaho."

Student presentation on this objective indicated that a motivating purpose of water projects should not be recreation. His

presentation gave facts to substantiate that with the exception of swimming facilities the state projection of need for water-based recreation was well supplied. He contended that water projects should be justified on the basis of other benefits, with recreation being merely an additional benefit. The student presentation complimented the Board in being "really on top of things, environmentally speaking". The presentation was likewise complimentary on the Board discussion with regard to encouragement of better use of existing facilities and indicated it meshed well the Idaho Department of Parks and Recreation recommendations in the Statewide Comprehensive Outdoor Recreation Plan (SCORP), that encourages improvement in quantity and quality of public access to Idaho's lakes and reservoirs. Caution was expressed that care be exercised in planning access to include consideration for safe use capacities of the facilities that are proposed. During this presentation the question was raised as to relative priority assigned each objective with regard to each other. It was recognized that conflicts between objectives would arise and student comment was that there was need somewhere to spell out a procedure on policy for making decisions on the conflicts between the requirements and goals of the different objectives.

State-Federal Rights

"The policy of the Idaho Water Resource Board is to actively promote state control over the use and conservation of Idaho's water resources. As a positive means to help resolve the question of federal versus state jurisdiction of water uses, the Board supports the proposal for the enactment of federal legislation which would require all federal rights and responsibilities to be clearly identified in the Basin Reports. Board proposed projects and programs, and those brought to the Board for approval or concurrence, will be evaluated

as to their effects on maintaining a strong position with regard to state control of all uses."

Student presentation here was very good in presenting the problem of the reserved right doctrine and the Winter's doctrine as background material to present the conflict between the state and federal government. Pointed out in the presentation was that a bill was being considered by the U. S. House of Representatives that would offer the following: "to provide for the inventorying and quantification of reserved, appropriative, and other rights to the use of water by the United States, and each agency of the United States to prepare a state by state inventory of all reserved rights, all appropriative rights, and all other rights to use of water within five years after passage of the bill. The inventory must include the priority data, source of water, and purposes and quantity of the water right." It also provides that any right listed in the inventory may be reviewed in an action brought against the United States in a U. S. district court. The student presenting this favored the Board supporting such a bill. He strongly supported the Board policy to promote legislation which would require all federal rights and responsibility to be clearly identified. He contended it was necessary before any serious long-range planning can be accomplished.

Wild and Scenic River

"The policy of the Idaho Water Resource Board is to support the concept of designating selected Idaho river segments as "wild and scenic", through either federal or state programs, so that legal protection can be provided to insure that the rivers and their immediate environments are preserved for the benefit and enjoyment of present and future generations."

Professor Warnick reviewed this objective with the group. One contention was that the term "wild and scenic" might be better replaced with a term such as "reserved river", indicating more specifically the broader reason of making a special use classification. He pointed out the problems of water rights jurisdiction and the ownership of the beds of navigable streams and lakes that the Board mentioned as having questions that need to be resolved in order to have clear cut policy on this classification of river use. A problem of jurisdictional responsibility for activities on the rivers as far as the boater and the recreationalist who is out on the stream appears to have no real state assigned agency other than the normal sheriffs' office in the county involved. It was recognized that in the case of "instant rivers" as covered under the National Wild and Scenic Rivers the land management agency involved appears to be exercising that management prerogative. The group appeared to favor the objective as written.

The objective on environmental quality as such was not treated in a separate presentation.

OBSERVATIONS AND RECOMMENDATIONS OF THE FACULTY

It would seem appropriate that the authors of this summary as faculty members who presided over the seminar and continuously monitored the discussions should close this report with a few conclusions and recommendations. It is our contention that the publishing of the objectives is a great step forward in planning. Even though many would say the statements are too broad and too much just the cliches of acceptable statements for public reference, it is contended that

a base of reference has been established. The format and the presentation is very commendable and it would be most helpful if other state agencies could array their policy objectives in a like manner. It would also be desirable if other states could specify their water resource planning objectives in equally brief and readable formats.

It is possible that the tone of this summary may appear to be critical of the effort. In general the comments were very favorable but it was the intent of the seminar to try to bring out places for improvement. A few items we would recommend, either as new objectives or by working them into the text of existing objectives, follow:

In the realm of groundwater we find little mention of this as an important aspect of the water resource. It would appear appropriate to emphasize the interaction of surface water and groundwater and develop a policy that would favor conjunctive use. Consideration of exchanges of groundwater for surface water rights would also tend to optimize the efficient and wise use of water and land resources. A specific clause or statement providing for protective consideration of the quality of groundwater would appear to have special merit as a planning objective.

In listening to the seminar and talking with the guest speakers it seemed to us that there was need for some kind of objective statement with regard to cooperation with federal agencies. It comes across very clear that the Board recognizes the need for a strong states-rights position. This is understandable and necessary, but it is obvious that the federal agencies have had and will have a

role to play in water resource planning, especially in the context of national and regional goals. We would not presume to say what the wording should be but it appears that an objective in this realm could be beneficial.

Apparently the work of the State Study Team and participation with the Pacific Northwest River Basins Commission, the Columbia River and Tributaries study of the Corps of Engineers and other federal program activities speaks well that the cooperation is being fostered. Advertising this will certainly help in fostering a better public acceptance of a plan that is to evolve.

Closely related to this would be an objective that would relate to interagency cooperation with other state agencies that have responsibility for water and related land resources. The student reaction and comments of some of the guest speakers tended to favor a broader and more specific involvement in planning by other state agencies.

From a technical standpoint it is recognized that planning must be based on good basic data. An objective statement that would favor a strong data collection system that is geared to have maximum retrieval capability through the latest computer processing would be a must for a policy. A point in this should be a long-term program that will assure that future planning efforts and day-to-day management needs will be met.

Related to the acceptance and success of the implementation of a water plan, is the way in which the objectives relate to neighboring states. Long-time efforts have been made by representatives of the State of Idaho to develop a Columbia River Compact. We would

say that the compact route is a desirable approach to reaching necessary compromises that will need to be made with respect to the water resources of the state and region. Although past efforts of getting a compact appear to have met with failure it still appears that an objective favoring such an approach is necessary to the success of planning

Although it may appear to be self-serving on our part, we believe that the Idaho Water Resource Board is in a good position to push for a strong state program of water resources research. A state water plan that fails to recommend such a program of research aimed beyond the frontier of present practice is short-sighted. Idaho cannot continue to depend primarily upon other states and the federal government for such activities. By using its colleges and universities in a coordinated program of water resource research the states' agencies and its institutions of higher education will all benefit. Research produces the new tools the practitioner will need in the future. But with the involvement of students it also helps to prepare those men and women who will someday step into the position of leadership in this state.

It is our conclusion that the seminar has done much to better educate a few of us on the importance of objectives in planning. Hopefully the young men who took part in this seminar will better appreciate the role of a strong public involvement in a water resource planning program. In general we feel that our state can point with pride to its process of water resource planning. Although it is doubtful that the results of the planning effort will meet with even near

unanimity, we do not feel that consensus is necessarily the best criterion of a successful effort.

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