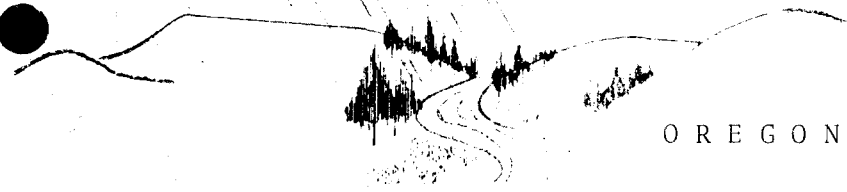


TD172
07



OREGON STATE UNIVERSITY

May 1974

Number 16

WATER USE MEASURES ON MAY BALLOT

Two measures which deal with the financial involvement of the state government of Oregon in developing more water for irrigation projects and for city supply systems will be voted on at the May primary election. The measures are (1) an amendment to the state constitution (SJR 38) and (2) a law (SB 861) which sets forth the procedures for effecting a financing program. SJR 38 will be on the ballot under the title of Ballot Measure 4.

It is a rather short document, and the provisions, in brief, are as follows:

1. The state is authorized to lend its credit, through the sale of bonds in an amount not to exceed one and one-half percent of the true cash value of all property in the state for the purpose of financing a fund designated as the Water Development Fund.
2. Monies from that fund may be used to finance nearly all requirements related to the development of an irrigation project.
3. Monies from the fund may also be used to purchase obligation securities issued by governmental entities for the purpose of development of community water supply systems.
4. Funding is restricted to Oregon residents, corporations, legally recognized groups and governmental entities.
5. The state is obligated to pay the value of the bonds as they become due and the interest at interim periods as it becomes due.
6. Ad valorem taxes (if needed) shall be levied annually, though the legislature may appropriate funds to negate the need of levying such a tax.

SB 861 is the enabling law which prescribes the authorities, procedures and restrictions of providing funding for certain water type projects. The law would become effective at the same time that the Amendment SJR 38 becomes effective.

The source of the aforementioned funding would be from the sale of bonds as authorized by SJR 38. The water projects are (1) irrigation development projects or (2) community water supply systems. Funds obtained from the sale of bonds would be made available in equal amounts to the two types of water projects.

* * * * *

Energy is a vital component of environmental rehabilitation as well as America's prosperity. The problem is whether reasonable energy demands can be met without harming the environment.

CONSTRUCTION APPROVAL

Developers of sites which might be "indirect" sources of air pollution are required to receive approval for construction from the Oregon Department of Environmental Quality (DEQ). These include certain highways, large parking lots and garages, major airports, and recreation, sports, and entertainment facilities with large parking lots. Final regulations regarding this pre-construction review were issued by EPA in February 1974.

The regulations specify different sizes of facilities to be reviewed in urban and non-urban areas. Oregon already has rules on the books regarding requirements for approval and setting forth guidelines. They are presently being re-drafted to bring them more into conformance with the federal regulations. DEQ will run its own program once final plans are approved by EPA.

The federal regulations apply to any source which commences construction on or after January 1, 1975. However, Oregon has been reviewing such construction plans for quite some time. In general, the impact of proposed parking areas comes up most frequently for review. The State Highway Division operates its own Environmental Section to weigh the overall impact of highway plans. The greatest problem with air pollution from traffic on roads and highways is in the urbanized areas.

STATE CANAL SUGGESTED

A Congressional hopeful has proposed a remedy for the summer water shortage in the Willamette Valley. He suggests that the water we need is available out of the Columbia River by low cost irrigation. He has asserted, "Through the use of pumps, siphons, canals and natural drainages all of the valley can be made more productive." A canal would be built over Cornelius Pass, with the main supply going through the gaps south of Gaston and Amity.

1975 WATER ASSESSMENT

The 1975 assessment of water and related land resources has been initiated by the United States Water Resources Council. It is a 3 1/2 year effort designed to identify and describe the nation's severe water problems. It will attempt to establish priorities and emphasize the need to resolve the problems.

The study is a cooperative effort of state, regional and federal agencies and completion date is set for June 1977. The Pacific Northwest River Basins Commission in Vancouver is responsible for coordinating activities in this region. In 1968, the only previous national assessment was completed. The 1975 evaluation is expected to go into more geographical detail and develop more regional and public participation.

Principal focus will be on those problems caused by lack of adequate water supplies (volume, flow characteristics, aquatic habitat) and existing conflicts among users which cause an otherwise sufficient supply to become unavailable for use in meeting requirements. In describing problem severity, special attention is supposed to be given to evaluating the economic, environmental, and social impacts of not finding solutions. Two time periods will be considered -- immediate problems (1975-1985) and future problems (1985-2000).

The resulting information will be used to establish priorities, draw conclusions, and make recommendations on what decisions are needed prior to 1980 to resolve both immediate and future problems. Regional and state viewpoints will be considered, as well as national. The hope is that the results will be presented in a manner that will be of direct use to Congress and lower level agencies concerned with water-related activities.

If the national average rainfall of the United States was spread out evenly over the country it would be about 30 inches. However, there are great local variations, from 1 to 80 inches.

WHAT'S A POLLUTANT?

It's illegal under the 1972 Federal Water Pollution Control Act to discharge pollutants into the nation's waters except under a permit issued in accordance with the National Pollutant Discharge Elimination System (NPDES).

Pollutants covered by this permit requirement are: solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural wastes discharged into water.

Excluded from the NPDES permit program are: discharges of sewage from vessels; pollutants from vessels or other floating craft in coastal or ocean waters; discharges from properly functioning marine engines; water, gas, or other material injected into oil or gas wells, or disposed of in wells during oil or gas production if the State determines that ground or surface water resources will not be degraded; aquaculture projects; separate storm sewer discharges; and dredged or fill material.

Discharges excluded from the NPDES permit system are covered by other pollution control requirements.

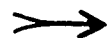
* * * * *

THE VALUE OF NATURAL STREAMS

A study conducted at the University of Kentucky had as its aim the development of a way to quantify those intangible values peculiar to a small stream and its watershed. Two techniques were employed and the results compared. Preference studies were conducted using color slides and these were followed by on-site evaluations.

Some of the general conclusions arrived at are:

- (1) A scene that includes a view of running water is usually preferred over one that includes still water or no water at all.
- (2) The stark beauty of a desert, lava flow or a winter pasture is not perceived by most people.
- (3) Some types of visual pollution (i.e., misfit billboards) are not recognized as such by some groups of people.
- (4) Familiar scenes are not considered particularly beautiful even though they may be so to outsiders.
- (5) Occupation and life style seem to have more effect on an individual's concept of natural beauty than age or sex.
- (6) People agree on what's very beautiful or very ugly in a scene but disagree on the in-between.
- (7) The semantic differential method as applied in this study yields measures of preference that are well-correlated with on-site evaluations by competent judges.
- (8) Predicting preference from the physical content of a scene yields only approximate results.
- (9) Reducing the number of stream characteristics used to compute uniqueness ratios did not greatly change the uniqueness rankings of the study streams.



Library
Serials Dept.



Non-Profit Org.
U. S. Postage
PAID
Permit No. 200
Corvallis, OR

Oregon State University
WATER RESOURCES RESEARCH INSTITUTE
AIR RESOURCES CENTER
Coveil Hall 115
Corvallis, Oregon 97331

(10) The recommended procedure for evaluating small streams is the factor score approach supplemented by a carefully conceived and executed preference study. The procedure should be applied to a random sample of all small streams in a state or region to establish a stream hierarchy. Factor scores and/or rankings for a given stream could, if desired, be worked into a benefit-cost or other such computation in the form of a weight or multiplier.

The study describes the procedures used and contains black-and-white photos of the slides. (From "Measuring the Intangible Values of Natural Streams, Part II". Research Report No. 66, 1973. University of Kentucky, Water Resources Research Institute, Lexington, KY.)

* * * * *

AIR POLLUTION COSTS

Relatively few studies on the costs of air pollution damage are available, according to EPA, but a number of reports are due to be published. Damage to human health, vegetation, materials, and residential property values has been examined and some cost figures estimated. Most of the estimates are for 1968, however, and there is a great need for current evaluations. Furthermore, an attempt is being made to broaden the scope of estimates to include more pollutants and more effects.

* * * * *