

The Water Resources Research Institute Program at Thirtysomething: How We Got There

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Viewer Discretion Advised

Genesis

- Roots in post-war Malthusian concerns about population growth and adequacy of natural resources.
 - Fairfield Osborn, “Our Plundered Planet”
 - William Vogt, “Road to Survival”
- Roots in the Cold War and concerns about reliance on other countries for necessary material and mineral resources.

Commissions and Conferences

- 1949 - UNESCO Technical Conference of the International Union for the Protection of Nature.
- 1949 - UN Scientific Conference on the Conservation and Utilization of Natural Resources.
- 1952 - The President's (Paley) Commission on Material Resources.

Paley Commission

- Concluded that U.S. did not possess all material and mineral resources necessary.
- Called for an assessment of natural resources and a scientific plan for utilization of natural resources.
- Resources For the Future established in 1952 as result of a recommendation.

The Kerr Committee

- 1959 - Senator Mansfield (MT) told a conference of Western Democratic Senators that water was the greatest resource problem facing the West and the Nation.
- Proposed an investigation of the adequacy of the nation's water resources and problems to be faced by the year 2000.

The Kerr Committee

- Select Committee assembled out of the Committees on Interior, Public Works, Commerce and Agriculture.
- Senator Kerr (OK) named chair.
- Ted Schad, (Library of Congress) named staff director.
- Committee held 22 hearings and commissioned studies by RFF and others.

The Kerr Committee

- Senator Kerr favored a minimum federal role in water resources planning.
 - Solution to water problems must be found locally and regionally.
 - Federal role was to assist.
- Kerr: the Committee need only arouse the nation to its water crises. He favored a factual report without recommendations

Senator Clinton Anderson

- Disagreed with Kerr and convinced the Committee to make recommendations.
 - #3. “The Federal Government should undertake a coordinated scientific research program in water.”
- Select Committee did not draft legislation.

Senator Clinton Anderson

- Initiated a Committee survey of water resources research in the Federal agencies and in universities, foundations, and private firms.
- Conclusions resulted in draft legislation for coordination and support of water resources research and training.
 - Several versions - eventually S.2

S. 2 and Predecessors

- Drafts sent for comment to over 100 universities, foundations, etc., involved in water resources research.
- A majority of the respondents approved of the draft and noted that the field was becoming increasingly fragmented and specialized.

Foundation in the Hatch Act

- Title 1 of S.2 closely modeled on the Hatch Act of 1887, which created the state agricultural experiment stations.
 - A ready-made constituency.
 - Emphasized the Federal-State partnership.
- Different from the Hatch Act in that the proposed water centers were to be university-wide to encompass all disciplines

Controversies

- Research coordination by Interior.
 - Ag. Secretary Freeman opposed a role for Interior as a coordinator of water research.
 - Bureau of the Budget disagreed with Interior's coordination role (their role?)
 - The final bill (S.2) “was combed by federal agencies for any such directive. The legislative history is filled with disclaimers ...”

Controversies

- Ag. Secretary Freeman also opposed S.2 because it would “complicate” the Ag. Departments longstanding relationship with land grant colleges.
- Cong. Aspinall (CO) argued:
 - Already too much duplication in water research
 - S.2 would promote division among land grant colleges and Title II would further dissipate research funds.

Water Resources Research Act of 1964, P.L. 88-379, July 17, 1964

- Title I
 - Institute in each State and Puerto Rico
 - Allotment Program of \$100,000 after 2nd Year
 - Matching Grant Program for Institutes
- Title II
 - Matching Grant Program Open to All But Institutes
 - Grants Required Congressional Approval

Office of Water Resources Research

- Established on July 17, 1964 to administer the Water Resources Research Act.
- John C. Calhoun, a vice president at Texas A&M, appointed acting director.
- Roland Renne, President of Montana State College from 1943-1964, served as the first Director, from 1965-1969.

Office of Water Resource Research

- OWRR reported directly to the Secretary of the Interior.
- “Such an independent agency assures that the program will not be pre-occupied with the limited mission of one Interior agency, but will keep in mind all Interior ...water missions as well as needs for water research within the states themselves.” (Benton Stong, staff, Senate Interior and Insular Affairs Committee, July 16, 1964)

Water Resources Research Act of 1964,
as amended by P.L. 89-404

April 19, 1966

- Deleted Provisions Allowing Congressional Approval of Contracts and Grants under Title II
- Increased Title II Authorization Over Time from \$5M in 1967 to \$10M in 1976

Testimony of James Watt in support of 1971 Amendments to the Act (June 29, 1971)

- “The present authorized allotment of \$100,000 to each institute is not adequate to support the desired scope of water resources research and related activities.”
- “...we are pleased with program achievements under the cooperative Federal - State Water Resources Research Act in the few years it has been in operation.”

Water Resources Research Act of 1964, as amended by P.L. 92-175

December 2, 1971

- Increased authorized institute allotment to \$250,000 from \$100,000
- Authorized DC, VI, and Guam Institutes
- Required assurance in application that Institute's program "developed in close collaboration with the leading water resources officials within the State."

Office of Water Research and Technology

- Formed as a result of a merger of OWRR and the Office of Saline Water on July 26, 1974.
- 1976 - House Appropriations Subcommittee called for investigation of OWRT.
- 1977 - Interior presented to Congress a plan and proposed legislation to redirect OWRT activities toward national goals.

Water Research and Development Act of 1978, P.L. 95-467, October 17, 1978

- Repealed the Water Resources Research Act of 1964 and the Saline Water Conversion Act of 1971
- Required 5-year research and development goals and objectives for the Institutes
- Required a 1:2 (non-federal: federal) match
- Authorized \$150,000/Institute in 1979 and \$175,000 in 1980.

Congressional Concerns: 1978 - 1980

- House Interior Appropriation Subcommittee recommended transfer of OWRT to the U.S. Geological Survey. No action was taken.
- House Appropriations Subcommittee expressed continuing concern about the quality of the Institutes. OWRT implemented major administrative reforms in the program.

An Act...Pertaining to Water Resources...and
Saline Water Conversion Research., P.L. 96-457
October 15, 1980

- Authorized \$150,000 per Institute for 1981 and \$160,000 for 1982
- Authorized \$1 million for an Institute program of tech transfer and information dissemination for 1981 and 1982
- Authorized \$8 million for the matching grant program for 1981 and 1982

FY 1982 Budget Actions

- March 1981 - OMB removed the OWRT Programs from the President's FY 1982 budget request on the basis that the institutes should be treated the same as the Mineral Resources Research Centers, which had also been zeroed out.

FY 1982 Budget Actions

- The House Appropriations Subcommittee added back funds for selected OWRT programs, but not the Institutes.
- The Senate Appropriations Subcommittee added back the Institute Program.
- Conferees funded all elements except the matching grant program, but at a greatly reduced level.

Summer of '82

- Senate Interior Approps. Subcommittee requested from Interior options for reducing the number of Institutes.
- OWRT was abolished by Secretarial Order on August 25th.
 - The Institutes were placed under OWP, headed by Tom Bahr (on leave from NM WRRRI).
 - Matching Grants (Sec. 105) program was placed under BuRec.

FY 1983 Interior and Related Agencies Appropriations Act, P.L. 97-394,

- Authorization for Institutes expired at the end of FY 1982
 - President's FY1983 Budget did not request funding for the Institutes
- Provided \$115,000 per Institute (\$6.21 M)
- Transferred \$6 million from OWP to BuRec for the matching grant program.

FY 1984 Interior and Related Agencies Appropriations Act, P.L. 98-146

- Provided \$115,000 per Institute.
- Did not fund the matching grant program
- Conference report recommended that the Institute Program be placed under the auspices of the U.S. Geological Survey
- Interior's OWP abolished by Secretarial Order on October 19th.
 - Institute Program transferred to USGS

1984 Reauthorization

- Reagan Administration opposed reauthorization because “the principal benefactors ..., the States and industry, have responsibility to finance the research needed in support of their water resources management or planning roles.”
- Congress reauthorized the Programs
- Reagan vetoed the legislation. Congress overrode the veto (only 3rd override)

Water Resources Research Act of 1984, P.L. 98-242, March 22, 1984

- Authorized additional institutes in American Samoa, the CNMI, and the FSM.
- Required periodic evaluation of Institutes.
- Authorized \$10 M for matching (allotment) grants, the match to increase from 1:1 to 2:1 over time.
- Authorized \$20 M for 1:1 matching grants available to institutes and others (Sec. 105).

Water Resources Research Act programs placed under USGS

- Matching Grant Program (Sec. 105) transferred from BuRec to USGS on January 24, 1985.
- USGS designated as the administrator of the Water Resources Research Act of 1984 by Secretarial Order on February 28, 1985.

1st Institute Evaluations

- USGS conducted evaluation site visits to all 54 Institutes between September 1985 and June 1987.
- Six Institutes Placed on Probation
- All six Institutes eventually recertified.

1988-89 Reauthorization Efforts

- Several reauthorization bills opposed by the Administration for several reasons:
 - Proposed reduction in 2:1 (nonfed:fed) match for institutes.
 - Authorization levels too high.
 - Reauthorization of Title III (Ogallala Research and Development).
 - Designation of FSM as an eligible State.

Water Resources Research Act of 1984,
as amended by P.L. 101-397

September 28, 1990

- Required that appropriated funds be used only for the reimbursement of direct costs.
- Authorized \$10 Million for the Institutes.
- Authorized \$5 Million for a 1:1 competitive matching grant program for research on water problems of a regional nature and for which priorities are set jointly by the Institutes and the Secretary [Sec. 104(g)].

1991 -1992

- The Federated States of Micronesia joined the Institute Program by forming a regional institute with Guam.
- The President's Budget did not request, and the Congress did not provide, funding for the Matching Grant Program (Section 105) for FY 1993 and thereafter.

2nd Round of 5-Year Evaluations

- Evaluations conducted in 1993 by a 4-person Panel based on evaluation reports submitted by the Institutes.
- Panel conducted site visits to 4 Institutes.
- No Institutes placed on Probation.
- Five Institutes were requested to respond to suggestions made by evaluation panel (none did).

Budget Requests: FY 1995-1997

- The President's Budgets did not request funds for the Institute Program for FY 1995, 1996, and 1997.
- Congress appropriated \$4.3 million for the Institutes each year.

1995 Reauthorization Efforts

- Administration opposed reauthorization because:
 - “[it] seeks to terminate Federal funding for grant programs ... that are not inherently Federal responsibilities. The Administration did not request FY 1996 or 1997 appropriations for the program and does not support continued Federal subsidies for it”

Water Resources Research Act of 1984, as amended by P.L. 104-147

May 24, 1996

- Authorized Institutes at \$5 M for FY 1996, \$7M for 1997 and 1998, and \$9M for 1999 and 2000.
- Authorized the Competitive Grant Program [Sec. 104(g)] at \$3M per year.
- Authorized USGS to accept funds from other Federal agencies for the Institutes.
- Authorized an Internship Program.

Omnibus Consolidated Rescissions and Appropriations Act of 1996, P.L. 104-134

(Interior Appropriations Report, House Report 104-134)

- Recommended a “base” grant of \$20,000 per Institute. The remainder of funds (\$3.2 M) to be awarded competitively in four regional competitions.
- Competitive Program “not to be structured to ensure that every participating institute ...gets a competitive award...”
- “The managers expect that this approach likely will lead to the closure of some institutes.”

FY 1999 Interior Appropriations Report (House Report 105-609)

- Base funding restored - Appropriated \$68,178 per Institute.
- Appropriated \$1 Million to support 1:1 Matching grants to be awarded under the terms of section 104(g) for research addressing “regional problems and for which research priorities are developed jointly by the Institutes and the Survey.”

1999

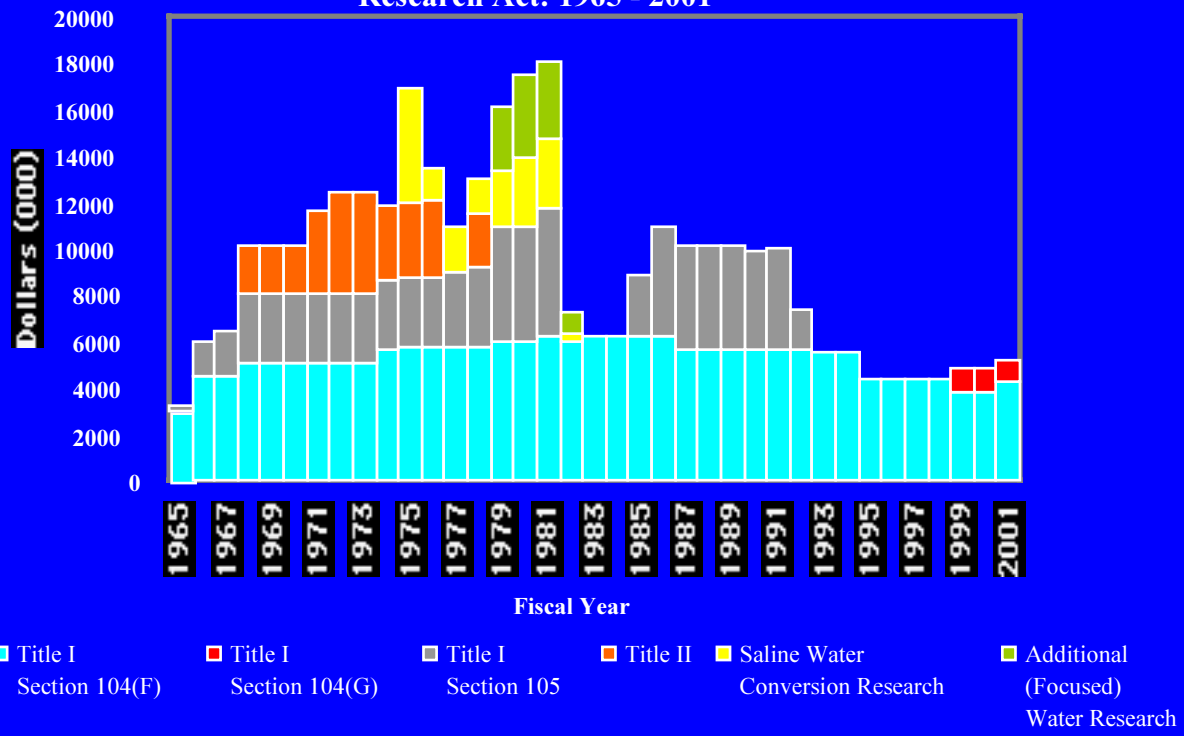
- Third Round of Evaluations Conducted
 - Four-Person Panel reviewed all Institutes based on evaluation reports submitted by the Institutes.
 - Panel recommended that 10 Institutes be placed on probation.
- The Commonwealth of the Northern Mariana Islands joined the Guam Institute.

Water Resources Research Act of 1984,
as amended by P.L. 106-374

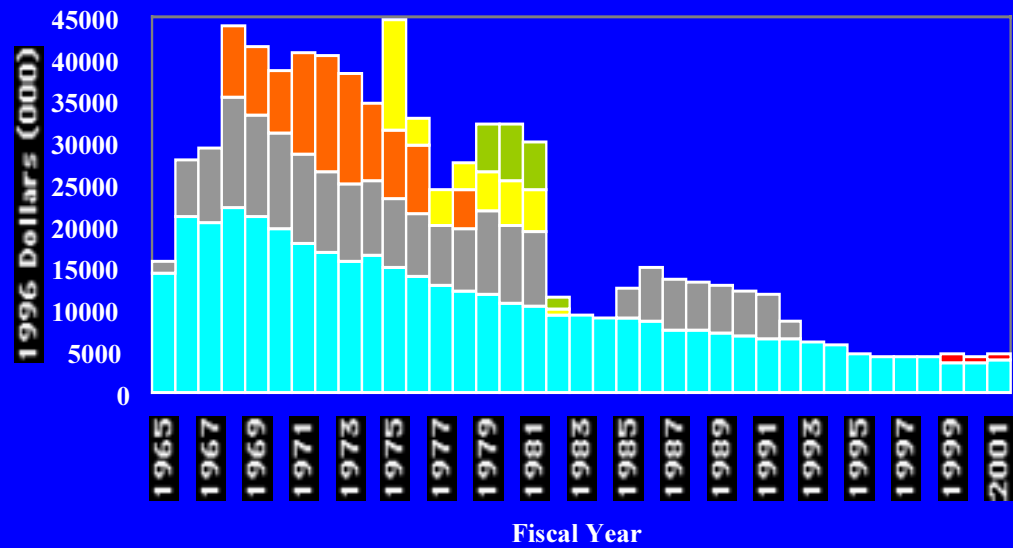
October 27, 2000

- Authorized Institutes at \$9M for 2001, \$10M for 2002 and 2003, and \$12M for 2004 and 2005.
- Authorized the Competitive Grant Program [Sec. 104(g)] at \$3M for 2001, \$4M for 2002 and 2003, and \$6M for 2004 and 2005.

Appropriations Under the Water Resources Research Act: 1965 - 2001

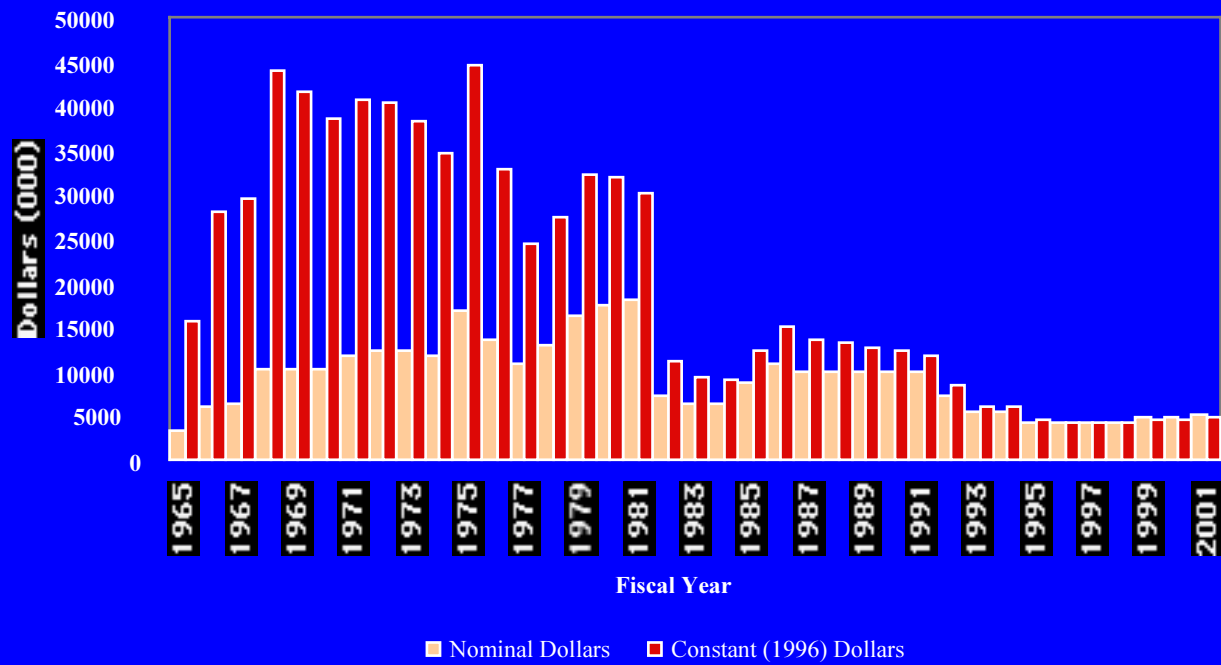


Appropriations Under the Water Resources Research Act in Constant (1996) Dollars: 1965-2001

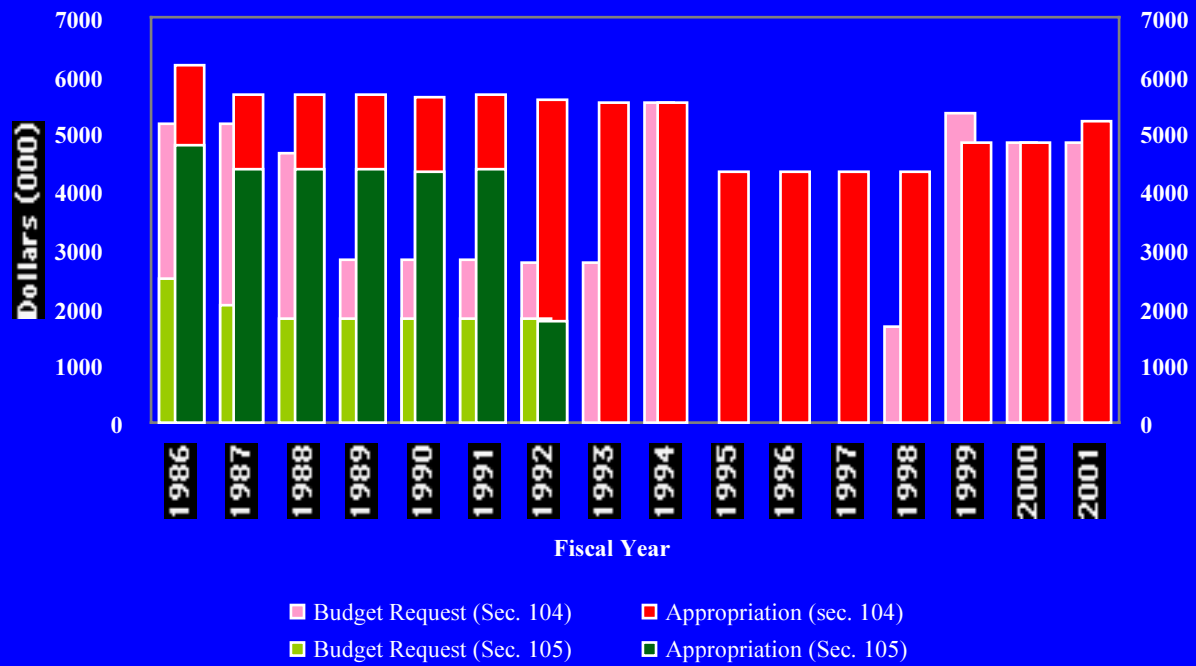


■ Title I Section 104(F)
 ■ Title I Section 104(G)
 ■ Title I Section 105
 ■ Title II
 ■ Saline Water
 ■ Additional Conversion Research (Focused) Water Research

Total Appropriations Under the Water Resources Research Act: 1965-2001



Section 104 & 105 Budget Request vs. Appropriation: 1986 - 2001



Refrain

- Too many institutes.
- Noncompetitive (allotment) funding of Institutes.
- Low productivity/research quality of some Institutes.
- Federal funding of research on state and local problems.
- Lack of research goals and coordination.

“The Interior Department will be requiring more information than schools are accustomed to supplying for other grants programs such as ...NSF. ...Continuance of this program will be very much affected by how well universities enable the Interior Department to dissipate Congressional doubts and reservations by a good clear showing of what the grants are being used for and how they produce new knowledge that is valuable for solving ... water problems.” (Benton Stong, staff, Senate Interior and Insular Affairs Committee, July 16, 1964)

“So we beat on, boats against the
current, borne back ceaselessly
into the past.”

F. Scott Fitzgerald, *The Great Gatsby*