

INTERGOVERNMENTAL ASPECTS OF WATER TRANSFER
IN IDENTIFICATION AND ASSESSMENT OF FEDERAL
AND INTERSTATE ISSUES AND CONSTRAINTS

By

JOSEPH W. WESTPHAL

and

JAMES J. LAWLER

Department of Political Science
Oklahoma State University

OKLAHOMA WATER RESOURCES RESEARCH INSTITUTE
Stillwater, Oklahoma

Contents of this publication do not necessarily reflect the views and policies of the Office of Water Research and Technology, US Department of the Interior, nor does mention of trade names or commercial products constitute their endorsement or recommendation for use by the U.S. Government.

April, 1980

**SELECTED WATER
RESOURCES ABSTRACTS**

1. Report No. 2.

3. Accession No.

W

INPUT TRANSACTION FORM

4. Title INTERGOVERNMENTAL ASPECTS OF WATER TRANSFER IN OKLAHOMA: IDENTIFICATION AND ASSESSMENT OF FEDERAL AND INTER-STATE ISSUES AND CONSTRAINTS		5. Report Date April, 1980
7. Author(s) Joseph W. Westphal and James J. Lawler		8. Performing Organization Report No.
9. Organization Oklahoma Water Resources Research Institute		10. Project No. A-084-OKLA
12. Sponsoring Organization Office of Water Research and Technology, Department of the Interior		11. Contract/Grant No. 14-34-0001-9038
15. Supplementary Notes		13. Type of Report and Period Covered

16. Abstract Intergovernmental aspects of water transfer from eastern to central and western Oklahoma were analyzed vis-a-vis three neighboring states (Texas, Arkansas, and Kansas). The three major objectives of the study were: to identify new proposals and developments since release of Phase I of the Oklahoma Comprehensive Water Plan; to identify major inter-state and national-state issues raised by the plan; and to assess the implications of these intergovernmental factors for implementation of the Plan. New proposals and developments include elaboration of the northern phase of the conveyance system, and the determination that conveyance of water for irrigation uses cannot be justified by economic criteria for federal water projects. Inter-state aspects include legal ramifications of four interstate compacts, and problems of coordinating planning efforts with neighboring states. Federal-state relations were considered in the context of court decisions in Arizona v. California and California v. United States; the U.S. Water Resources Council's major planning objectives; the High Plains Project of the Economic Development Administration; and the requirements of the National Environmental Policy Act of 1969. The impossibility of planning in-state water development apart from a regional and inter-governmental context is stressed.

17a. Descriptors Oklahoma, Interstate, Interstate Commissions, Interstate Compacts, Interstate Rivers, River Basin Commissions, River Basins, Texas, Kansas, Arkansas, Federal Government, Water Resources Development, Water Supply Development, River Basin Development

17b. Identifiers

17c. COWRR Field & Group

18. Availability	19. Security Class. (Report)	21. No. of Pages	Send To: WATER RESOURCES SCIENTIFIC INFORMATION CENTER U.S. DEPARTMENT OF THE INTERIOR WASHINGTON, D. C. 20240
	20. Security Class. (Page)	22. Price	

Abstractor James J. Lawler	Institution Oklahoma State University
----------------------------	---------------------------------------

TABLE OF CONTENTS

PART I		Page
	Introduction	1
PART II		
	The Oklahoma Comprehensive Water	5
	A. The Statewide Water Conveyance System	6
	B. The Northern Conveyance System.	9
	C. The Southern Conveyance System.	10
PART III		
	Intrastate Dimensions of Water Transfer.	18
	A. Interstate Compacts	18
	B. Water Planning by Neighboring States.	20
PART IV		
	Federal-State Relations and Water Transfer	23
CONCLUSIONS	25
NOTES	29

LIST OF TABLES

Table	Page
1. Projected Requirements and Potential Development of Water Resources for the Eight Planning Regions	8
2. Summary of Costs Statewide Water Conveyance System.	11
3. Amounts of Water Imported for Northern and Southern Conveyance Systems	13
4. Water Related Agencies.	16

LIST OF FIGURES

Figure	Page
1. Legal, Economic, Social and Institutional Factors of Impact to Interbasin Transfer.	2
2. Region Impacted by Oklahoma Comprehensive Water Plan.	3
3. Statewide Water Conveyance System (Including Proposed Local Projects).	7

PART I

INTRODUCTION

Implementation of a program such as the Oklahoma Comprehensive Water Plan on interbasin water transfer is affected by a number of non-technological factors (See Figure 1), which may become major constraints to implementation despite the fact that the technology essential for success may be attainable. This study will attempt to identify and assess the intergovernmental issues which may have an impact on future decisions concerning implementation of the Comprehensive Plan in Oklahoma. The present analysis, which is primarily concerned with relations among governments, is a continuation of a study of Commitments, Priorities and Organizational Options on Water Resource Planning in Oklahoma, which examined aspects of water transfer other than inter-governmental considerations.¹

A major plan to transfer water from eastern to western Oklahoma will invariably be affected by the legal commitments of the state to compacts made with its neighbors. In addition, surrounding states have their own plans to future development of water resources, and there are regional considerations that make planning difficult. The region which is most relevant to our study includes the states of Arkansas, Kansas, New Mexico, Texas and Oklahoma (shown in Figure 2). Oklahoma has inter-state compacts with all of the other states and shares many of the physical, social, and institutional characteristics of its neighbors. Interaction between these states regarding water resources has been steadily increasing. This is most prominently reflected in the development of regional organizations such as the Ozarks Regional Commission, the Red River Valley Association, the

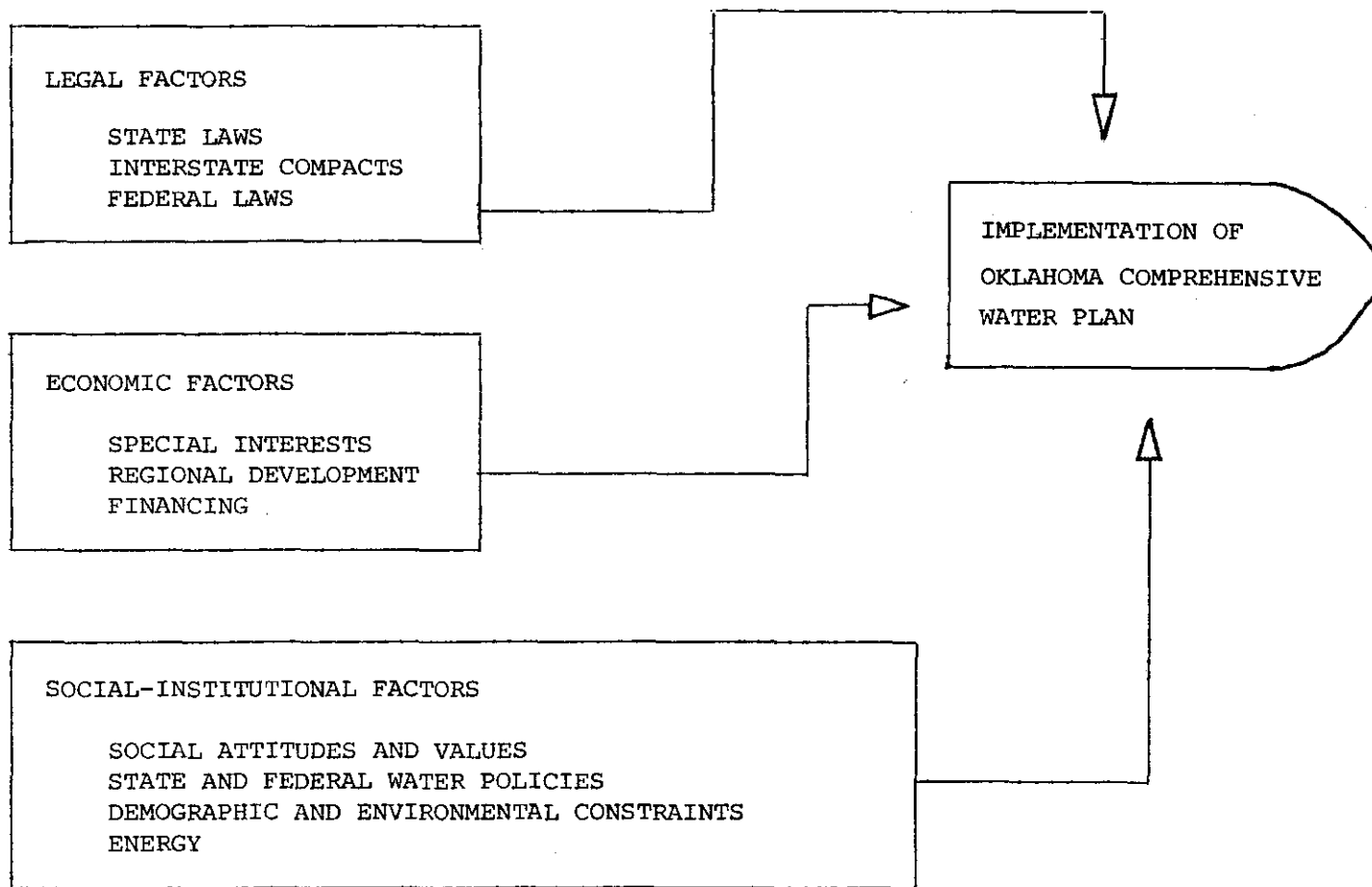


Figure 1. Legal, Economic, Social and Institutional Factors of Impact to Interbasin Transfer

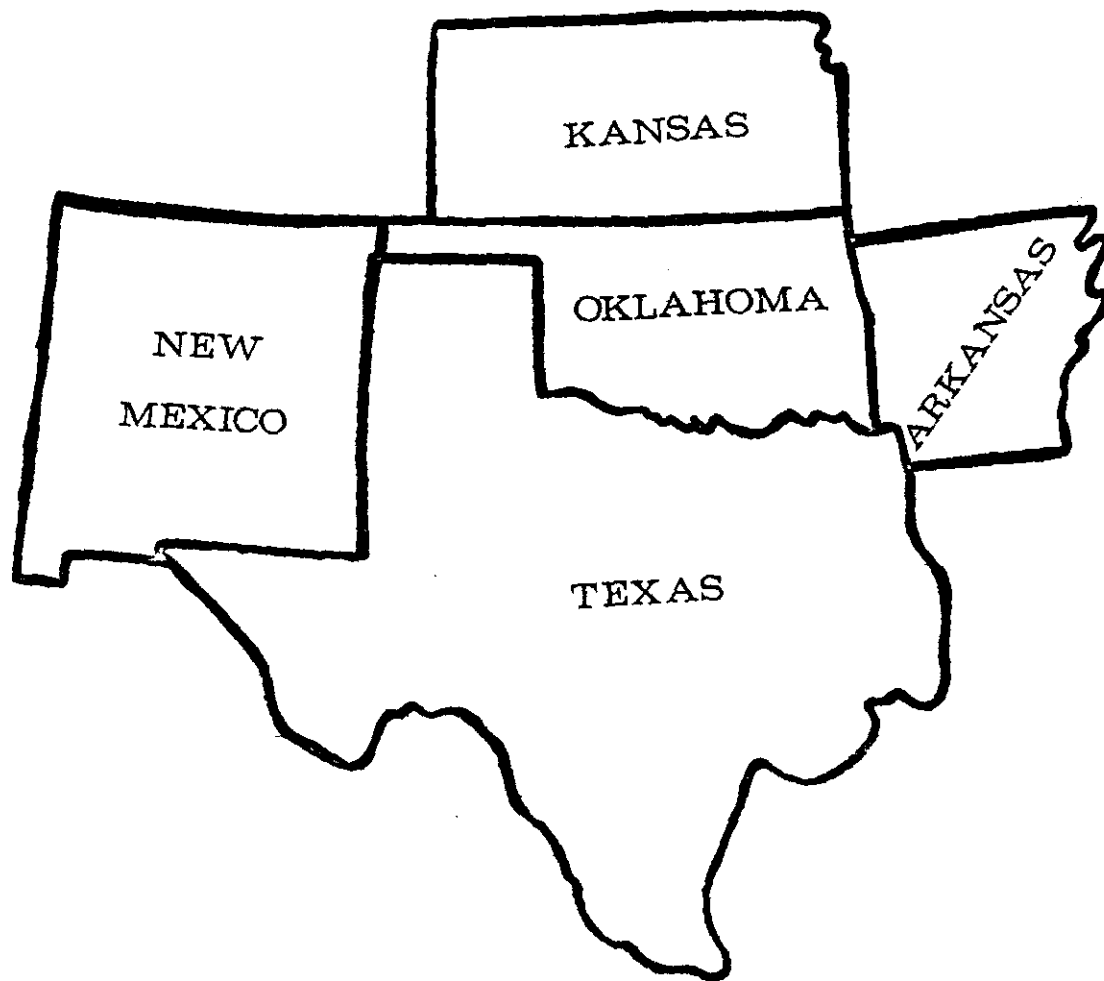


Figure 2. Region Impacted by Oklahoma Comprehensive Water Plan

Arkansas Basin Development Association, and the Arkansas River Coordinating Committee. Most recently, the formation of the High Plains Study Council, organized to monitor and study the decline of the Ogallala ground-water formation, consists of six states which are very concerned about the regional implications of water supply in the High Plains. This move toward greater interstate cooperation has been partly stimulated by the increasing awareness of common problems needing costly and region-wide solutions. The necessity for cooperation has also been partly affected by federal involvement and encouragement through public spending.

The objectives of this study are as follows:

1. To identify the new proposals made for the transfer of water from east to west in Oklahoma since Phase I of the Oklahoma Comprehensive Water Plan
2. To identify the major intergovernmental issues that have impact on future decisions to transfer water
3. To assess the possible impacts of these issues as they affect the proposals for water transfer

To accomplish these objectives, this study will describe the nature of the Oklahoma Comprehensive Water Plan and will attempt to identify the major intergovernmental factors which may have impact on water transfer. In addition, the interstate dimension of the Plan will be assessed by examining the major provisions of the interstate compacts as well as the relationship with neighboring states and their planning directions.

PART II

THE OKLAHOMA COMPREHENSIVE WATER PLAN

The State of Oklahoma recently completed a plan for a statewide water conveyance system to provide additional water supplies to the western regions of the state. The surplus water from eastern Oklahoma (an area of much greater stream and ground-water resources) would be transported to western Oklahoma (an area of severe water shortages) through two water conveyance systems.² The plan was designed to meet Oklahoma's anticipated water demands through the year 2040. These anticipated demands are most significant in western Oklahoma where the Ogallala ground water basin is being rapidly depleted as a result of overdrafting. In addition, central Oklahoma has experienced substantial growth in the industrial sector and will require additional sources of water in the future. The basic goals of the plan reflect both state and federal guidelines as well as the economic development of the state.

The goals as stated in the plan are as follows:³

- to promote economic opportunity and development
- to preserve and enhance the environment
- to protect lives and property from floods
- to expand agricultural production and agribusiness activity
- to develop recreational potentials
- to maintain and improve water quality
- to encourage water conservation
- to place excess and surplus water to beneficial use
- to encourage and provide for public participation in water resources planning

In order to accomplish the objectives of economic opportunity and development, the Comprehensive Plan proposed multicounty regions where local water development projects could be undertaken using local surface and ground-water resources. The local water development projects would be designed and planned to meet the water needs of the region through the year 2040. Analysis of the eight planning regions and their projected water requirements revealed that the three eastern regions would have surplus water after meeting their projected needs. The findings of the Board are shown in Table 1. Both central and western regions are predicted to experience deficits once all the local resources are exploited. The Plan makes it clear that although other options or alternatives are available and should be studied, interbasin transfer appears to be the most feasible long-term solution. The Plan discusses the feasibility of such structural and non-structural alternatives as weather modification, conservation, wastewater reuse, desalination, chloride control and artificial recharge. None of these alternatives was found to be significant with respect to providing additional water to meet the projected needs.⁴

A. The Statewide Water Conveyance System

The plan to transfer water and meet projected needs to the year 2040 consists of two water conveyance systems (see Figure 3). The northern conveyance system would use surplus waters from Lake Eufala and Robert S. Kerr Reservoir and convey them to nine terminal reservoirs in the north central and northwestern regions of the state.⁵ Surplus water would move through the system to meet the needs of the region. The southern water conveyance system would probably use surplus waters from Clayton, Hugo, Tuskahoma and Boswell reservoirs for transport to central and southwestern Oklahoma. The Plan estimates that central Oklahoma would receive approxi-

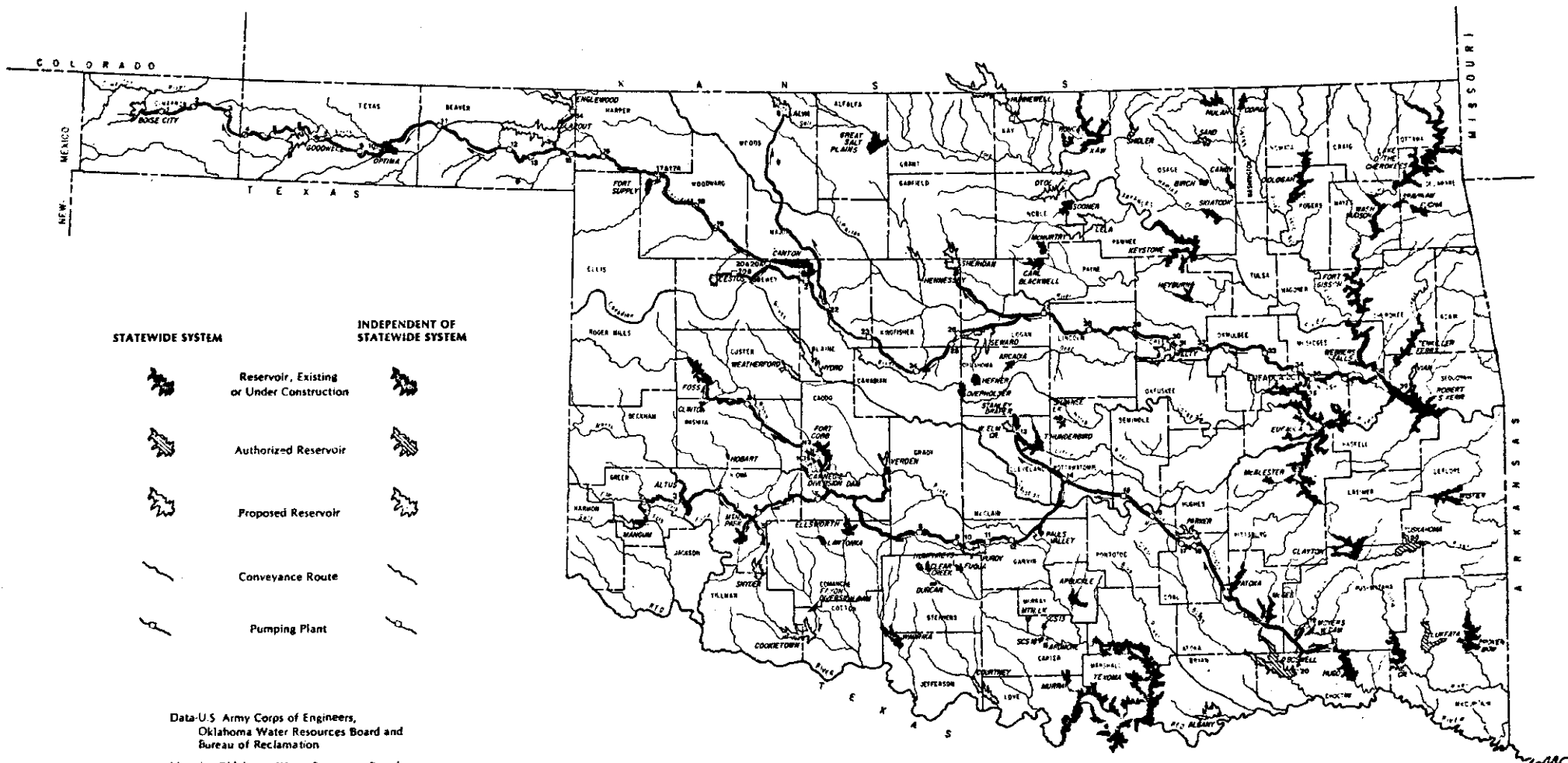


Figure 3. Statewide Water Conveyance System (Including Proposed Local Projects)

Source: Oklahoma Water Resources Board, Oklahoma Comprehensive Water Plan

TABLE 1
 PROJECTED REQUIREMENTS AND POTENTIAL DEVELOPMENT OF WATER
 RESOURCES FOR THE EIGHT PLANNING REGIONS

<u>Region</u>	<u>Projected Yr./2040 Requirements (1000 AF/yr)</u>	<u>Potential Development (1000 AF/yr)</u>	<u>Surplus -Deficit (1000 AF/yr)</u>
Southeast	548.7	4,120.0	3,571.3
Northeast	971.0	3,062.8	2,091.8
East Central	365.1	1,957.6	1,592.5
South Central	228.8	193.3	-35.5
North Central	659.9	561.7	-98.2
Central	819.7	332.7	-487.0
Southwest	1,392.8	593.9	-798.9
Northwest	1,953.5	1,006.4	-947.1
Total	6,939.5	11,828.4	4,888.9

Source: Oklahoma Comprehensive Water Plan, Chapter VI.

mately 487,000 acre/feet per year to be utilized mainly for municipal and industrial purposes. An additional 823,000 acre/feet/year would be conveyed to southwestern Oklahoma and seven terminal reservoirs.⁶ This water would be principally for irrigation purposes. According to the Plan, the conveyance system was based on the following set of assumptions:

1. That existing multipurpose reservoirs be tied into the overall system in order to maximize the use of existing development,
2. That all ground and stream water resources of good quality in western Oklahoma be developed to the maximum extent practical,
3. That all proposed local projects be encouraged for development so that the import requirements of each region be minimized.

B. The Northern Conveyance System

The conveyance system would employ pumping plants, pipelines, existing and authorized dams, storage and terminal reservoirs, and other major independent reservoirs to move water. The northern conveyance system would require the following:⁸

1. Modification of three existing reservoirs
2. Construction of eight proposed reservoirs
3. Approximately 710.5 miles of canals and inverted siphons
4. Approximately 139.5 miles of pipeline
5. Forty-two pumping plants including 6 with reservoir intakes
6. Municipal and industrial delivery systems
7. Irrigation distribution systems

This system would provide approximately 1,045,300 ac/ft/yr (with conveyance losses of approximately 177,700 ac/ft/yr) of water for municipal, industrial and agricultural demands in the north central and northwestern regions of the state. The system would require surplus flows from the

Canadian River at Eufala Lake and the Arkansas River at Robert S. Kerr Lake.⁹ According to the Plan, three existing reservoirs would be used. These are: Canton in Dewey and Blaine counties, Fort Supply in Woodward County, and Lake Optima in Texas County. These three reservoirs would serve as terminal storage for the conveyance system. Most of the 1,034,400 ac/ft/yr, or 95% of water, would be used for irrigation of approximately 500,000 acres of land.¹⁰

The costs of construction of the northern conveyance system are shown in Table 2. The costs for construction are estimated at \$5,296,000 million. The estimated value of water for municipal and industrial use are expected to be approximately \$1.60 per thousand gallons while the value of irrigation water is estimated at \$335.00 per acre foot. These estimates include "the allocated cost for transportation and storage of irrigation water as well as irrigation distribution facilities from terminal reservoirs to the irrigated areas."¹¹ The Plan anticipates that completion of the northern conveyance system would require building in three stages with a completion time of 30 years. A capability to import sufficient water is anticipated after the thirteenth year.

C. The Southern Conveyance System

The southern conveyance system would run approximately 200 miles to central Oklahoma at Wayne and from there 327 miles to the southwestern part of the state. The first 200 miles would require "canals, pipelines, conduits and pumping plants to transport surplus water from the Kiamichi River near Moyers, Oklahoma and Hugo and Boswell Lakes to central Oklahoma and to a point near Wayne."¹² The water would be transported and stored at existing Lake Stanley Draper, West Elm Lake and West Elm Creek. From Wayne, water would be conveyed to the southwest where terminal storage would be

TABLE 2
SUMMARY OF COSTS STATEWIDE
WATER CONVEYANCE SYSTEM
(\$1,000)

Water Conveyance System	Construction Cost	Total Average Annual Equivalent Cost ³
Northern System ¹		
Reservoirs ²	\$ 600,000	\$ 10,200
Conveyance Facilities	3,440,000	95,600
Irrigation Distribution	1,100,000	220,100
M & I Distribution	71,000	33,300
Mitigation/Compensation	<u>85,000</u>	<u>5,600</u>
Subtotal	\$5,296,000	\$364,000
Southern System		
Reservoirs ²	\$ 225,000	\$ 3,400
Conveyance Facilities	1,425,000	75,000
Irrigation Distribution	765,000	95,000
M & I Distribution	75,000	15,200
Mitigation/Compensation	<u>18,000</u>	<u>1,300</u>
Subtotal	\$2,508,000	\$189,900
TOTAL	\$7,804,000	\$554,700

¹Cost estimates shown for northern system assume Arkansas River Basin Chloride Control Projects operational. Costs without the chloride control projects would be \$5.6 billion for construction and \$375 million for average annual equivalent costs.

²Reflects cost of proposed reservoirs, modifications to existing lakes and water supply storage in existing, under construction and authorized federal reservoirs.

³Includes interest and amortization at 6 5/8 percent interest and 100-year period of analysis. Also includes average annual OMR&E expenses and mitigation/compensation costs.

Source: Oklahoma Comprehensive Water Plan, Chapter VI.

provided by three proposed and four existing reservoirs. The entire system would provide approximately 1.3 million ac/ft/yr of water to central and southwestern Oklahoma of which 56% of the water would be used for irrigation purposes (See Table 3).

The costs for construction of the southern conveyance system are estimated to exceed \$25 million. For municipal and industrial use, the estimated value of water was \$.30 cents per thousand gallons. For irrigation, the estimated value was \$200.00 per acre-foot of water. Table 2 shows the various construction cost estimates.

The southern conveyance system would be constructed in four stages lasting approximately 30 years to date of completion with sufficient capability for enough import water after the thirteenth year.

TABLE 3
 AMOUNTS OF WATER IMPORTED FOR NORTHERN AND
 SOUTHERN CONVEYANCE SYSTEMS
 (1,000 AF/yr)

<u>Northern Conveyance System</u>	<u>Municipal/ Industrial</u>	<u>Allocations</u>	
		<u>Irrigation</u>	<u>Total</u>
North Central	34.3	63.9	98.2
Northwest	<u>21.0</u>	<u>926.1</u>	<u>947.1</u>
Total	55.3	990.0	1,045.3
<u>Southern Conveyance System</u>			
Central	487.0	0	487.0
South Central	18.5	17.0	35.5
Southwest	<u>73.8</u>	<u>725.1</u>	<u>798.9</u>
Total	579.3	742.1	1,321.4

Source: Oklahoma Comprehensive Water Plan, Chapter VI.

PART III

INTRASTATE DIMENSIONS OF WATER TRANSFER

Among the several recommendations promoted by the Oklahoma Water Resources Board in the Comprehensive Water Plan, one is particularly aimed at the intergovernmental nature of the issue. The recommendation is as follows:

That all state agencies and political subdivisions of the state involved in water-related activities take due cognizance of the Oklahoma Comprehensive Water Plan in carrying out their duties and responsibilities.¹³

Although the Oklahoma Water Resources Board is the primary agency assigned the task of planning for the development of the state's water resources, it is not the only agency which has jurisdiction over matters affecting and affected by the Comprehensive Water Plan. State and substate agencies that may have influence over planning and development of the state's water resources are listed below.¹⁴

State Agencies

1. The Oklahoma Water Resources Board

The major responsibility of the Oklahoma Water Resources Board is the administration of the state's water laws through the (1) issuance of ground and stream water permits, (2) control of waste discharge, (3) promulgation and enforcement of water quality standards, (4) determination of irrigation districts throughout the state, (5) approval of design and engineering of all non-federal water works projects, (6) compilation of data concerning the state's water resources, (7) inspection and investigation of water works projects, (8) coordination of Federal Flood Insurance Program, (9) negotiation and administration of interstate stream compacts, and (10) development of statewide plans for the utilization, conservation and regulation of the State's water resources. The Board is responsible for preparation of the Oklahoma Comprehensive Water Plan.

2. Oklahoma Conservation Commission

The Commission is responsible for providing assistance in the conservation and development of the state's renewable natural resources. It generally provides technical assistance in such areas as soil erosion, flooding, development of water supply and preservation of wildlife. It does not have planning or regulatory powers.

3. The Department of Wildlife Conservation

The Department's major responsibility is the protection and management of the state's bird, fish, game and wildlife resources. The Department has responsibility for the construction and maintenance of 17 Department lakes in the state. It has regulatory and development authority.

4. The Department of Health

The Department is responsible for the prevention, control and abatement of water pollution associated with the discharge of municipal and other domestic wastes problems.

5. Conservation Districts

The Districts may exercise both planning and regulatory powers in the conservation of the State's renewable resources. They are the only local units of government charged with the responsibility to conserve renewable natural resources.

Other state agencies and substate districts with jurisdictions over certain areas of water resources are listed in Table 4. The areas of duplication or overlap in the planning, coordination, and development areas could have potential significance to implementation of the transfer plan. Agencies are as much affected by regional issues and constraints as they are by the imperatives of their survival and administrative structures.

A plan of the technical and economic magnitude of the Oklahoma Comprehensive Plan will necessitate not only a concerted effort toward cooperation but some reorganization and restructuring of jurisdictions and authorities to make implementation necessary. This analysis does not

TABLE 4

WATER RELATED AGENCIES

<u>State Agencies</u>	<u>Planning</u>	<u>Regu- lation</u>	<u>Data Collection & Research</u>	<u>Assis- tance</u>	<u>Coordi- nation</u>	<u>Devel- opment</u>
Oklahoma Water Resources Board	X	X	X	X	X	X
Dept. of Health		X	X	X		
Dept. of Wildlife Conservation		X	X			X
Oklahoma Conservation Comm.				X	X	X
Dept. of Civil Defense	X			X	X	
Dept. of Transportation	X		X	X	X	X
Dept. of Tourism and Recreation	X		X			X
Dept. of Agriculture Corporation Comm.		X	X			
Land Commission		X				
Dept. of Mines		X				
Grand River Dam Authority	X	X	X	X		X
Geological Survey			X			
Industrial Development Dept.			X	X		
Pollution Control Coordinating Board	X	X	X		X	
Dept. of Economic and Community Affairs				X	X	
Department of Energy			X	X		
<u>Local and Special Purpose Districts</u>						
Master Conservancy Districts			X		X	
Irrigation Districts					X	
Weather Modification Districts					X	
Rural Water Districts					X	X
Scenic River Comm.		X				X
Port Authorities	X				X	X
Substate Planning District	X		X	X	X	

propose to recommend the direction of this reorganization but seeks to caution the need for awareness of the consequences and benefits of any such structural and organizational changes.

PART IV

INTERSTATE IMPACT ON THE OKLAHOMA COMPREHENSIVE WATER PLAN

There are two major areas of interstate impact on Oklahoma's plan for water transfer from east to west. One area is the legal commitment of the State to the four major interstate compacts in which it participates. The second, is the effect on Oklahoma's planning by the water development activities of the surrounding states. This study seeks to identify and assess the impact of interstate relations on Oklahoma's plan to transfer water.

A. Interstate Compacts

Interstate compacts are formal agreements between states that require the approval of Congress. Since the early 1900s the number of compacts approved has increased dramatically as states have employed them for settling disputes and promoting cooperation. Today there are over 20 interstate compacts involving one or more of the 19 western states.¹⁵ These compacts deal principally with the apportionment or allocation of water resources. Some interstate compacts will also include provisions for conservation storage capacity,¹⁶ flood control,¹⁷ and pollution abatement programs.¹⁸

Compacts are sometimes used to protect the local areas from federal action or enhance the power of the states. Also, as Glendening and Reeves point out in their study of federalism, many compacts "result from the activities of private economic groups with special interest in the

resources involved - that is, farmers, private power producers, manufacturers and processors."¹⁹

Oklahoma participates in four interstate compacts as listed below:

The Red River Compact (1978) with Arkansas, Louisiana and Texas

The Arkansas River Basin Compact (1973) with Arkansas

The Arkansas River Basin Compact (1966) with Kansas

The Canadian River Compact (1952) with New Mexico and Texas.

Three of the four compacts may have significant impact on the Oklahoma Comprehensive Water Plan. To the north, the Arkansas River Basin Compact with Kansas poses limitations on storage capacity rather than percent of flow or consumptive use. Conservation storage capacity is defined in the compact as:

that portion of the active storage capacity of reservoirs, including multipurpose reservoirs, with a conservation storage capacity in excess of 100 acre feet, available for the storage of water for subsequent use, but it excludes any portion of the storage capacity allocated to flood and sediment control and inactive storage capacity allocated to other uses.²⁰

The compact permits Oklahoma unrestricted conservation storage construction in the Arkansas River Basin, but places some restrictions in the Cimarron River Subbasin within its boundaries. Analysis of the apportionment scheme set up by the compact indicates that even with maximum practical development of storage in Kansas, the impact to Oklahoma's annual yield would be minor.

To the east, Oklahoma and Arkansas have agreed on the Arkansas River Basin Compact. This compact apportions the waters of the Arkansas River Basin and provides a Commission with authority to issue such appropriate, court-enforceable orders as it deems necessary for the proper administration of the Compact.²¹

The third compact, with Texas, Arkansas and Louisiana, is the Red River Compact. Under this compact a state may use water allocated to it in any manner it deems beneficial. The Red River is divided into five regions from west to east. Only two of the regions are pertinent to Oklahoma. The first is the westernmost region where annual flow within the subbasin is apportioned 60 percent to Texas and 40 percent to Oklahoma. Storage on Lake Texoma is apportioned at 50 percent for each state. The second region is the southeast corner of Oklahoma and its relationship with Arkansas. The limitation for the subbasin including the Little River and its tributaries above Millwood Dam, is as follows:

The States of Oklahoma and Arkansas shall have free and unrestricted use of the water of this subbasin within their respective states, subject, however, to the limitations that Oklahoma shall allow a quantity of water equal to 40 percent of the total runoff originating below the following existing, authorized or proposed lost downstream major damsites in Oklahoma to flow into Arkansas:

Little River
Glover Creek
Mountain Fork River²²

At the present time these compacts do not present real obstacles to water transfer. However, planning requires much research and analysis as to the long-term effects of drawing water from one region and the needs of downstream users. In addition, consultation with the various multistate organizations should precede any implementation of such magnitude as the Comprehensive Water Plan.

B. Water Planning by Neighboring States

One state with very similar needs and constraints as Oklahoma is Texas. Like Oklahoma, Texas is concerned with the rapid depletion of ground water in the Ogallala Formation, or High Plains Region, and the

scarcity of water resources in general in its western regions. Texas recently created the Texas Water Import Authority in an attempt to begin to search for sources of water to be imported to the Texas High Plains area. Attention has focused on the eastern regions of Oklahoma and the states of Arkansas and Louisiana as areas with large quantities of water. Texas has indicated a need for approximately 10 million acre feet annually and it looks to the surpluses in the east for a solution to its problem. It is certain that any diversions by Oklahoma would endanger the possible importation of water by Texas. Legal precedent in this area is not well established, although federal law and federal projects can affect the allocation of waters among states in a variety of ways, as for example, the case of Arizona v. California (373 U.S. 546 (1963)).

The issue of diverting water across state lines or the appropriation of water within one state for diversion across the state line for use by a neighboring state is very complex. Many states, including Oklahoma, have passed legislation restricting the appropriation of water in their state for use in another state. Court decisions in this area and the principles recognized by the judiciary can be summarized as follows:

- (1) "A water right may be acquired under the doctrine of prior appropriation by the diversion of water at a point on a stream in one state and its application to beneficial use on lands in another state where the stream flows in both states." But that:
- (2) The water statutes of the states involved have no extraterritorial effect. And that:
- (3) The state in its sovereign capacity may exercise its authority over the waters flowing in the streams within its borders. And it has the right to prohibit their diversion within the State boundaries for use outside them.
- (4) Whatever power a state may have to prevent the acquisition of an appropriative right within

its territory for use of water in another state cannot be exercised to the impairment of a pre-existing validly established appropriative right of a project that overlaps the stateline. Protection of such a right is secured to its holder by the constitution of the United States.²³

In the state of Oklahoma, the law does not permit the sale or use of the waters of the state to a person, firm, corporation or other state or subdivision of government unless authorized by the Oklahoma Legislature.²⁴ Despite this fact, the State does consider the feasibility of cooperative efforts with surrounding states for development of a regional water transfer plan.

PART V

FEDERAL-STATE RELATIONS AND WATER TRANSFER

A water transfer plan of the magnitude proposed by the State of Oklahoma requires a great deal of interaction and cooperation between state and federal agencies. The state should remain the major instrument for planning, implementation and management. However, its dependence on federal funding for both research and construction as well as regulatory control allows for a good deal of federal input. Federal inducements with respect to environmental issues are quite powerful. The US Water Resources Council has proposed what it considers to be major planning objectives with regard to water resources projects. The objectives are environmental quality, economic development, social well-being, and regional development. Although it would be difficult to prioritize these objectives, environmental quality is certain to have the greatest impact from a federal perspective. Several environmental laws will have an effect on both planning and implementation. These laws include the National Environmental Policy Act, the Federal Water Pollution Control Act, the Clean Water Act, the Federal Water Quality Act, Scenic Rivers Act, the Toxic Substances Control Act, the Safe Drinking Water Act, and the National Flood Insurance Act. Attention to environmental concerns will be required, despite the literal interpretation of the National Environmental Protection Act that applies directly to federal agency action. The extent of federal participation in the Oklahoma transfer plan would require environmental impact statements even on portions constructed without federal funds. The EIS would be required as

long as that portion of the project would have no independent utility from another portion funded with federal monies. Since large amounts of water would be moved from and to federally-funded reservoirs, it would be difficult to avoid federal requirements for environmental quality. In many cases, the federal requirement will be that the state have primary responsibility for enforcement or regulation of environmental standards and that federal intervention will only be a result of state inaction or breakdown.

The federal-state relationship is at its optimum when a balance can be struck between the regional/national development and the state-centered sources of power which play an active role in planning and management. For the states, the fear of restricting growth or economic development will often mean a reluctance to adhere to stringent environmental standards.

Perhaps the best way to offset the possible conflicts that could develop as a result of federal policy versus state and local autonomy, is a strong commitment to cooperation in the planning stages of the project. In the case of the Oklahoma Comprehensive Water Plan, there has been a good deal of federal participation in the organization of the Plan. Such agencies as the U.S. Army Corps of Engineers and its planning efforts on the Central Oklahoma Project and the Bureau of Reclamation's study of the state's water needs, are good examples of this type of participation. Other federal agencies involved in various aspects of the water plan include the Soil Conservation Service, the U.S. Geological Survey, the Economic Resources Development Association and the U.S. Fish and Wildlife Service.

Planning can and ought to be used as a coordinating device to aid in accommodating national, regional, and local needs. Inter-governmental planning processes will best be used to identify water resource needs and uses in accordance with both federal and state policy.

CONCLUSIONS

Viewed in the context of federalism, the Oklahoma Comprehensive Water Plan (OCWP) involves a complex network of cooperative and competitive relations among a variety of governmental units. The competitive aspect of inter-state relations has provided political impetus for the OCWP, principally as a result of concern in Oklahoma that, without such a Plan, "surplus" water now leaving Oklahoma might be pre-empted by other states, such as Texas.²⁵ According to a report of the Research and Reference Division of the Oklahoma Legislative Council, "At least with the adoption of a portion of the state plan, Oklahoma will be telling these outside entities that we have prior claim on our water and we intend to make use of it."²⁶

Yet the development of a conveyance system funded, at least in part, by Oklahoma revenues, has been identified by the Texas Water Development Board as the most economical delivery system for the water-deficient High Plains of Texas.²⁷ Indeed, parts of western Oklahoma, as well as Texas, Colorado, New Mexico, and Kansas, are included in the High Plains Project area. Studies sponsored by the Economic Development Administration of the United States Department of Commerce, have considered a variety of alternative sources of water for the Region. Both the northern and southern interconnected systems could facilitate importation of water from eastern Oklahoma or Arkansas to the High Plains. Such a possibility raises the prospect of either a new partnership among the states concerned, or intensification of resistance to interbasin transfer in eastern Oklahoma, depending upon the extent to which co-operative arrangements for sharing burdens,

as well as benefits, of the transfer can be devised.

The OCWP may have major potential environmental and economic consequences for states which are present recipients of waters which are identified as "surplus" in the Plan. Environmentalists have claimed potential damage to marine life in the Gulf of Mexico, thus affecting fishermen and oystermen along the Gulf.²⁸ Environmental Impact Statements for the project should, thus, include consideration of impacts outside the State of Oklahoma.

Implementation of the OCWP depends upon developments in other states. The chief water administrator in Kansas in 1978 stated that, in his opinion, the Arkansas River Basin compact of 1965 between Oklahoma and Kansas "does not require restriction of water in Kansas to insure a certain flow into Oklahoma."²⁹ Although it has been estimated that maximum practical development of storage in Kansas would not, by itself substantially reduce Oklahoma's annual water yield, such development should be considered in conjunction with other contingencies, including the compact commitment with Arkansas requiring 40 percent of the water to flow downstream. The possible repercussions of the OCWP upon legal commitments under these compacts warrants close consultation among all signatories before a conveyance system is begun.

The successful negotiation of the Red River Compact in 1978, among Oklahoma, Texas, Arkansas, and Louisiana has helped to define the legal parameters of water development planning in Oklahoma. All interstate waters of Oklahoma will, henceforth, be subject to compact allocations. Yet Oklahoma Water Resources Board Director, James Barnett, believes that the key to preserving water for Oklahomans lies in putting it to beneficial use within the State.³⁰ The case of Arizona v. California³¹ in effect asserted the constitutional power of the United States Congress to order interbasin transfers of untapped surplus water among states, thereby raising the spectre of the Oklahoma water transfer issue being settled by the fiat of the federal government.

The decision of the United States Supreme Court in California v. United States,³² holding that a state may impose any condition on control, appropriation, use or distribution of water in a federal reclamation project which is not inconsistent with clear congressional directives, departs from a trend toward increasing federal control over waters within state boundaries. Yet federal authority remains pervasive and formidable. Our study has addressed the major planning objectives of the United States Water Resources Council and the environmental quality requirements of the National Environmental Policy Act. The paramount importance of coordination with the federal agencies concerned was stressed. Although there has been a close working relationship between the Oklahoma Water Resources Board and those federal agencies which have been oriented toward structural approaches to water development (the US Army Corps of Engineers, the Bureau of Reclamation, and the Soil Conservation Service), an adjustment to the thinking of agencies less responsive to dams and pipelines (the US Water Resources Council, the Council on Environmental Quality, the Fish and Wildlife Service and the Environmental Protection Agency) is essential to the success of a viable water development plan for Oklahoma. The regional emphasis of the Economic Development Administration may also provide hope for a Comprehensive Plan which meets the needs of the agriculturally important interstate region of the High Plains.

Besides analyzing the interstate and national-state aspects of the OCWP, our study considered developments in water planning in the state subsequent to publication of Phase I of the Plan in 1975. Two of the most important of these developments relate to intergovernmental relations: the elaboration of plans for the northern interconnected system, which will deliver water to the Oklahoma portion of the High Plains, and the determination by the Corps of Engineers and the Oklahoma Water Resources Board that

the irrigation portion of the Plan cannot qualify for federal support under existing project criteria, which exclude secondary benefits from consideration. Given the potential importance of the water to the agricultural viability of the High Plains Region, there is some irony in these developments. Unless the transfer can be accomplished in an interstate context, unless an exception can be made to the rigors of the federal criteria for purposes of High Plains development, or unless planning begins immediately to develop all feasible nonstructural alternatives, federal efforts to preserve the economically important interstate region may be fruitless. In any event, the inadequacies of state borders in defining the boundaries of state water development planning is illustrated by the Oklahoma Comprehensive Water Plan.

NOTES

1. Joseph W. Westphal and James J. Lawler, Commitments, Priorities and Organizational Options for Water Resource Planning in Oklahoma. Oklahoma Water Resources Research Institute, Oklahoma State University, August 1979.
2. Oklahoma Water Resources Board, The Oklahoma Comprehensive Water Plan, Final Report (Unpublished), 1980.
3. Ibid., Chapter I.
4. Ibid., Chapter Vi.
5. Ibid.
6. Ibid.
7. Ibid.
8. Ibid.
9. Ibid.
10. Ibid.
11. Ibid.
12. Ibid.
13. Ibid., Chapter IX.
14. Ibid., Appendix.
15. Walter A. Hutchins, Water Rights Laws in the Nineteen Western States, (Washington D.C.: U.S. Government Printing Office), 1971, Vol. III, p. 87.
16. Arkansas River Basin Compact (Between Oklahoma and Kansas).
17. Pecos River Compact (Between New Mexico and Texas).
18. Arkansas River Basin Compact (Between Kansas and Oklahoma).
19. Parris N. Glendening and Moris Reeves, Pragmatic Federalism (Pacific Palisades, CO: Palisades Publishers), 1977.
20. Arkansas River Basin Compact (Between Kansas and Oklahoma).
21. Arkansas River Basin Compact (Between Arkansas and Oklahoma), Art. IX (A) (7).
22. Red River Compact (Between Texas, Oklahoma, Arkansas and Louisiana), Art. V, Sec. 5.03 (b).

23. Walter A. Hutchison, Water Rights Laws, p. 390.
24. Title 82 O.S., Supp. 1972, Sec. 1085.2.
25. John Steiger, "Claiming Our Water," Tulsa Tribune (April 24, 1978).
26. Ronald W. Hogan, The Oklahoma Comprehensive Water Plan, (Oklahoma City: Research and Reference Service Division, Oklahoma State Legislative Council, December 16, 1976), p. 28.
27. See Kenneth Frederick, A Study Design for the High Plains Development Project (Washington, D.C.: Resources for the Future, Inc., submitted to Economic Development Administration, U.S. Department of Commerce, July, 1976).
28. Constance E. Taylor and R. John Taylor, "Environmental Impact of the Oklahoma East-West Water Conveyance System," Proceedings of the Oklahoma Academy of Science, vol. 52 (1972), pp. 121-24, p. 122.
29. Mr. Guy E. Gibson, Chief Engineer, Division of Water Resources, Kansas State Board of Agriculture (personal correspondence to James Lawler, August 7, 1978).
30. James Barnett, quoted in "Historic Red River Water Pact Ready for Signing," The Sunday Oklahoman (May 7, 1978).
31. Arizona v. California, 373 U.S. 546 (1963).
32. California v. United States, 98 S. Ct. 2985 (1978).