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WATER FOR UTAH

A Review of Duties and Funding Programs of the Division and Board of Water Resources

January 2009

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BOARD OF WATER RESOURCES

BEAR RIVER DISTRICT

Box Elder, Cache, and
Rich Counties

BLAIR R. FRANCIS - CHAIR

P.O. Box 69
Woodruff, UT 84086
Phone: (435) 793-4243 (home)

UPPER COLORADO RIVER DISTRICT

Carbon, Emery, Grand,
and San Juan Counties

CRAIG E. JOHANSEN - VICE CHAIR

15 East 1000 North
P.O. Box 487
Castle Dale, UT 84513
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jt@etv.net

PROVO RIVER DISTRICT

Juab, Utah, and
Wasatch Counties

PAUL MCPHERSON

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Nephi, UT 84648
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mcpersonfarms@msn.com

GREEN RIVER DISTRICT

Daggett, Duchesne,
and Uintah Counties

D. BRAD HANCOCK

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(435) 722-2500 (home)
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WEBER RIVER DISTRICT

Weber, Davis, Morgan,
and Summit Counties

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Kaysville, UT 84037
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LOWER COLORADO RIVER DISTRICT

Beaver, Garfield, Iron,
Washington, and Kane Counties

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SEVIER RIVER DISTRICT

Millard, Sanpete,
Sevier, Piute, and
Wayne Counties

ROBERT D. BESSEY

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SALT LAKE DISTRICT

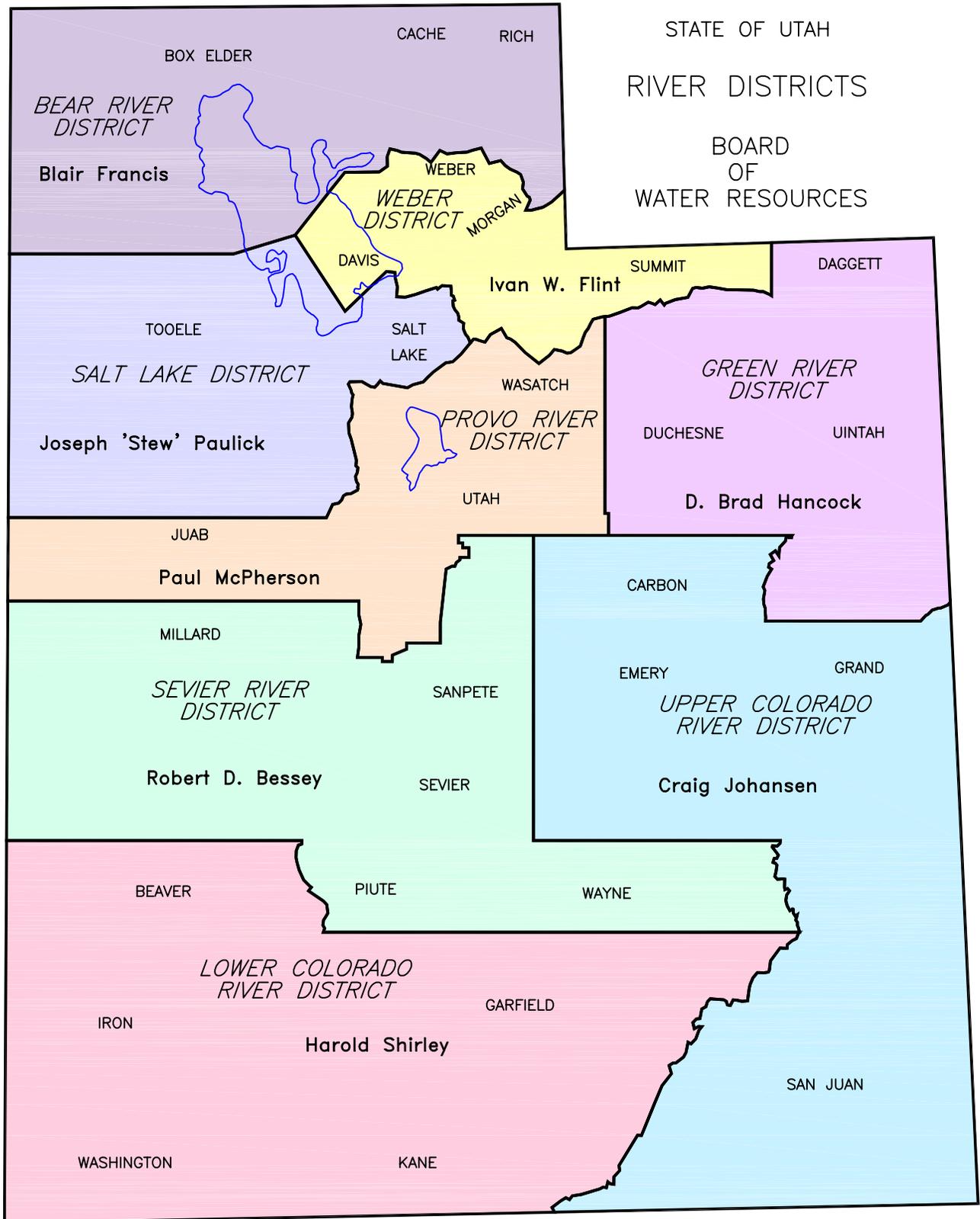
Salt Lake and Tooele
Counties

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STATE OF UTAH
RIVER DISTRICTS
BOARD OF WATER RESOURCES



BOARD/DIVISION OF WATER RESOURCES
Briefing Paper

The Division of Water Resources (Division) is one of seven agencies of the Utah Department of Natural Resources and is the water resources authority for the State of Utah. The Board of Water Resources (Board) is the policy-making body of the Division.

Legislative Authority

- Protect Utah's rights to interstate waters.
- Provide comprehensive water planning.
- Manage Utah's water resource project construction programs.

Mission

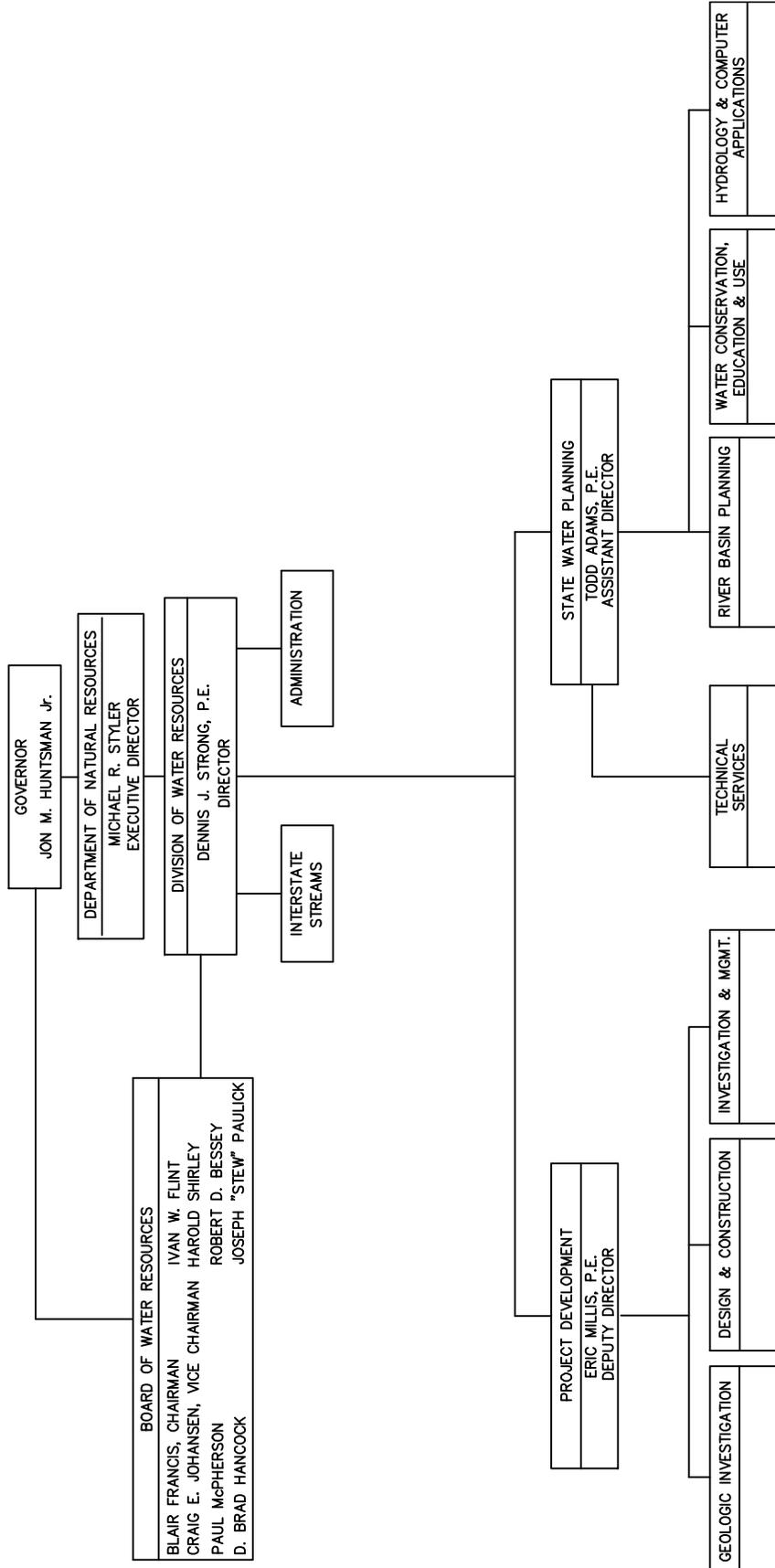
- **The Division of Water Resources plans, conserves, develops, and protects Utah's water resources.**

Goals

- Implement water education/conservation programs that encourage wise municipal, industrial, agricultural, and environmental water use.
- Defend and protect Utah's rights to develop and use its entitlement to interstate streams.
- Continue state water planning activities to identify future water needs and assist water entities in meeting those needs.
- Provide technical and financial assistance to encourage the highest beneficial uses of water consistent with economic, social, and environmental consideration.
- Maintain accurate and current water supply and land use data for each hydrologic basin in the state.
- Promote cloud seeding operational projects and research.



DIVISION OF WATER RESOURCES



FEBRUARY 2009



INTERSTATE STREAMS AND STATE AND FEDERAL RELATIONS

Geography, history and national politics have a profound influence on water management in Utah. Drainage basins covering more than half the state are associated with interstate streams. The water resources of these areas are governed by state water law, as well as interstate compacts. In addition, over two-thirds of the lands of the state are owned and administered by the federal government and federal laws and regulations associated with these lands present unique problems to state water planners and administrators. Increased environmental awareness has generated federal legislation that significantly constrains the formulation and implementation of water-related activities.

The Board, with the approval of the department executive director and the governor, designates a representative of the state of Utah in all interstate conferences and meetings between the state of Utah and one or more basin states held to enter into compacts to divide interstate waters or to discuss interstate streams issues. Dennis Strong, the Division of Water Resources (Division) Director serves as Utah's Interstate Streams Commissioner, the governor's representative on Colorado River management issues and is Utah's representative on the Upper Colorado River Commission, and Bear River Commission. In addition the Director serves on the Western States Water Council, Colorado River Basin Salinity Control Forum and Advisory Council, and the Glen Canyon Adaptive Management Work Group.

Because control of much of Utah's water resources is affected by actions of other states and federal agencies, active participation on selected interstate and state/federal bodies is essential to protect Utah's interests.

Upper Colorado River Commission

The states of the Upper Colorado River Basin share approximately six million acre-feet of the waters of the Colorado River. Of the allocation, 50,000 acre-feet of consumptive use is apportioned to Arizona; of the remainder, 51.75% is apportioned to Colorado, 11.25% to New Mexico, 14% to Wyoming, and 23% to Utah; Utah's annual entitlement is estimated to be 1.369 million acre-feet.

The Upper Colorado River Commission was created by the Upper Colorado River Compact of 1948. The Commission has a federal chairman (appointed by the president) and one member from each of the four Upper Division States - Colorado, New Mexico, Utah and Wyoming. Dennis Strong is Utah's commissioner and Dallin Jensen serves as the alternate commissioner. In addition, the Board appointed the following advisers to the commission: Don Christiansen, general manager of the Central Utah Water Conservancy District; Scott Ruppe, manager of the Uintah Water Conservancy District; Kent Jones, Acting State Engineer; Robert King, of the Division; and Norman Johnson, Assistant Attorney General.



Bear River Commission

The Bear River Commission is created by a three-state compact between Idaho, Utah and Wyoming; comprised of a federal representative, appointed by the president, and three members from each of the states.

Utah Code specifies that Utah's Interstate Streams Commissioner shall be the chairman of Utah's delegation to the Bear River Commission. In addition, a commissioner from the Bear River Basin (above Bear Lake) and a commissioner from the basin (below Bear Lake) are appointed by the Board with the consent of the Governor. An alternate for each of the two can also be appointed. By law, these four persons must be irrigators and live on irrigated farms located in the basin. The current Utah delegation to the Bear River Commission is composed of Dennis Strong, chairman of the Utah delegation; Blair Francis, the Upper Bear River Basin commissioner; and Norman Weston, alternate. Both men live in Rich County. In the Lower Bear River Basin, Charles Holmgren of Box Elder County is the commissioner and Joseph Larsen of Cache County is the alternate. Kent Jones, Acting State Engineer; Norman Johnson, Assistant Attorney General; and Todd Adams of the Division serve as advisers to the Utah commissioners.

Western States Water Council

The Western States Water Council was organized in June 1965 by the governors comprising the Western Governors Conference, with the stated purpose of accomplishing effective cooperation among the western states in planning for programs leading to integrated water resources development by state, federal and other agencies. Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, Washington and Wyoming are members of the council. Because the Western Governors Conference was disbanded and the Western Governors Association (WGA) has been created, the council now reports to the WGA.

The principal function of the Council has been to foster areas of agreement, where the combined strength of western state water officials is able to influence actions of Congress and federal agencies on water policy. The Council has developed a high degree of prestige and is doing a creditable job representing the states and their governors on water matters.

Each state may designate three individuals as Council members and additional alternate members. The appointments are made by the governor, and they serve at his pleasure. Utah's members are currently Norman Johnson (Legal Committee), Larry Anderson (Water Resources Committee), Dennis Strong (Executive Committee), and Walt Baker, Division of Water Quality (Water Quality Committee).

Colorado River Basin Salinity Control Forum and Advisory Council

The salinity concentrations of the waters of the Colorado River have been of major concern to the seven Colorado River Basin States (Utah, Colorado, New Mexico, Wyoming, California, Arizona and Nevada). The salt content of the water has an economic impact on agricultural and



municipal and industrial uses in the Basin. The Salinity Control Forum was created in 1972 with the concurrence of the Governor and the water development and water quality agencies of the seven states. Although it has no specific legislative mandate, the forum has been very successful as a means of obtaining comity and strong congressional support for salinity control projects.

It is important to the proper function of the Forum that members are professionals from the water development and water quality agencies of state government. Walt Baker (Division of Water Quality), Randy Crozier (Duchesne County Water Conservancy District), and Dennis Strong are Utah's members to the Forum.

In 1974 Congress passed the Colorado River Salinity Control Project Act, which authorizes funding for salinity control projects. The act also provides for the appointment of three members to an advisory council by each governor of the seven Colorado River basin states. The Council is responsible for advising the Secretary of Interior, the Secretary of Agriculture and the Administrator of the Environmental Protection Agency on salinity matters. The Council meets annually with representatives of Interior and Agriculture departments and the Environmental Protection Agency. Dallin Jensen, Walt Baker and Dennis Strong serve on this council at the pleasure of the governor.

Governor's Representative on Colorado River Management

Following the 1983 flooding on the Colorado River, the Secretary of the Interior invited each of the seven governors to name a personal representative to negotiate management policies on operations of the reservoir system on the river. Meetings are held frequently between the seven representatives and staff of the Bureau of Reclamation to discuss Colorado Basin issues. Dennis Strong is the Governor's representative.

Glen Canyon Adaptive Management Work Group

Created by the Grand Canyon Protection Act of 1992, the Glen Canyon Adaptive Management Program includes a federal advisory committee to make recommendations to the Secretary of the Interior on the operations of Glen Canyon Dam to enhance and protect the downstream environment in the Grand Canyon, while also maintaining the purposes for which Glen Canyon Dam was built. Dennis Strong is Utah's representative on the Federal Advisory Committee and Robert King of the Division serves as an alternate on the committee as well as on the technical committee. They help protect Utah's interest in its Colorado River water supply, recreation on Lake Powell, environmental enhancement, and power generation capacity at Glen Canyon Dam.



STATE WATER PLANNING

The Division is responsible to plan for and encourage the use of the state's water resources. To do that, the Division has established the following planning objectives:

- Help local, state and federal agencies coordinate water resources planning and development activities.
- Maintain programs with federal and state agencies to obtain streamflow, climatological, SNOTEL, water quality data, water-related land use and municipal and industrial water use data.
- Develop and maintain river basin models for state planning purposes and operational models for specific project feasibility and development studies.
- Study technologies and methods that will help meet future water resource needs.
- Continue to formulate and maintain both a State Water Plan and basin plans that: (1) identify and quantify existing and projected municipal, industrial, agricultural and environmental water use; (2) identifies and quantifies water supply sources; and (3) identifies how much additional water will be needed and makes recommendations for meeting future needs; (4) identifies and studies water-related topics and issues that must be considered in meeting future water needs.

River Basin Studies

Since completion of the Utah State Water Plan in 1990, the Division has completed 11 detailed basin plans covering the entire state. The plans describe water resource development opportunities and problems in the basins, identify options, and make recommendations for future actions. They also help coordinate the activities of local, state and federal water agencies within the river basins. The Division published an updated statewide plan in 2001 entitled "Utah's Water Resources: Planning for the Future". Updates of the 11 previously published basin plans will be done on an as-needed basis. The Bear River Plan has been updated and work is being done to update the Weber River Basin Plan, a combined plan for the Cedar/Beaver and Kanab Creek/Virgin River basins, and the Jordan River and Utah Lake basin plans.

Resource Inventories, Computer Modeling and Special Studies

The Division obtains needed data and provides technical modeling and hydrologic analysis for state water planning, water development projects, and coordination with federal and state agencies. Some of the current activities/studies by the planning branch include participation in the Quality Growth Efficiency Tools planning process; statewide summaries of water-related land use and municipal and industrial water use; residential per capita water use; and technical models for the Great Salt Lake, Uinta River operation, Lake Fork River and Ashley/Brush



Creeks simulation. Simulation models of the Bear, Weber, and Virgin rivers are continually updated and used by the Division and managers for water planning.

Conservation and Education

The Water Conservation and Education programs are focused on activities and programs to help Utahns reduce the per capita municipal and industrial water use of Utah residents. The division is committed to expand efforts in water conservation and education by:

- a. Providing materials and teacher training in public schools; sponsoring the Utah Waters Van program and the Water Education Poster Contest and Banquet.
- b. Assisting the Governor's Water Conservation Team
- c. Working with local water agencies to develop and implement water conservation programs, including education of the general public as to how to use Utah's water wisely;
- d. Promoting modification of laws, ordinances and regulations to promote efficient water use.

Cloud Seeding

Cloud seeding has long been recognized by water professionals as a feasible means to augment the natural water supply. Conditions are especially favorable in Utah where topography, climate and water storage reservoirs make winter snowpack enhancement cost-effective.

Utah enacted weather modification legislation in 1973, and an operational cloud seeding program was funded in 1976. The field program, which usually extends from November to April, is funded jointly by the state and local water interests. Statistical analysis of the cloud seeding program since its beginning shows an average increase in precipitation of 8% to 20% in seeded areas at a cost of about \$1.70 per acre-foot for the additional water.

WATER DEVELOPMENT PROGRAMS

In 1909 the Utah State Legislature approved an "Act to Provide for a Utah State Conservation Commission" to prevent waste of the natural resources in Utah. On March 17, 1921, the Legislature created the Utah Water Storage Commission. Its principal powers and duties were "to make investigations, looking to a full and proper development and utilization of the state's water supply." That organization continued until March 31, 1941, when the Legislature abolished the Commission and gave its powers and duties to a newly-created Publicity and Industrial Development Department.



The Utah Water and Power Board was created in 1947. At the same time, the Legislature implemented a Revolving Construction Fund to provide financial assistance for the construction of water development and conservation projects. This began the legacy of the state's participation in a self-help water development cooperative effort that continues to function today.

With the creation of the Department of Natural Resources in 1967, the Legislature established the Board of Water Resources (to supersede the Water and Power Board) and the Division of Water Resources to administer the state's responsibilities in water resource matters and act as technical advisor to the Board and Governor. The energy crisis of the 1970s brought rapid growth to many Utah cities. To help local leaders upgrade their culinary water systems, the 1974 Legislature created the Cities Water Loan Fund. Still faced with the need to develop additional water resources and the federal government's waning participation in funding water projects, the 1978 Legislature created a Conservation and Development Fund to help develop large projects.

In 1990 the Dam Safety Act was passed and the Board again was given a new funding responsibility. Dam safety is included in the Revolving Construction Fund and the Board is authorized to provide grants to bring high hazard dams up to current dam safety standards. Grants are provided only when the legislature appropriates money for dam safety grants. The State Engineer classifies all dams into one of three categories: high, moderate, or low hazard. The Board, in concert with the State Engineer, ranks high hazard dams based on their potential to cause loss of life and/or property damage. Grants of at least 80% are given based on the ranking priority and money appropriated.

Beginning in 1947 with the creation of the Water and Power Board, and continuing with the Board of Water Resources, both technical and financial assistance has been provided to public and private entities to more effectively utilize the state's water resources. Since initiation of that policy, the state legislature has appropriated approximately \$288 million for water development. Because the Board requires financial assistance be repaid (hence the term revolving loan program is often used), the Board has provided over \$576 million through its Revolving Construction, Cities Water Loan, and Conservation and Development Funds, with a ratio of over \$2.94 in construction for each dollar provided by the Board. Through its Dam Safety Funding Program the Board has provided grants totaling nearly \$62 million to bring 27 high hazard dams up to current dam safety standards. Funding programs are administered through the Division under the direction of the eight-member Board. The Board and Division are charged with planning for full utilization of the water and power resources of the state. During the past 60 years the Board and Division have been involved in the planning, design, construction, and financing of 1,311 water projects.



**Board of Water Resources
Summary of Project Types
1947-2008**

Projects With Feature	Project Type
29	Dam Safety Construction Projects
125	Dams, Dam Repair, Enlargement
50	Diversion Dams
61	Wells
149	Canals and Canal Linings
93	Pipelines
224	Sprinkler Systems
90	Dual Water Systems
431	Municipal and Domestic Systems
59	Miscellaneous
1,311	TOTAL



DAM SAFETY CONSTRUCTION GRANTS

The Legislature appropriates funds for dam safety construction grants to the Board's Revolving Construction Fund. The Board has adopted guidelines for making grants to dam owners whose dams require upgrades as a result of the 1990 Dam Safety Act. The Board will provide at least 80% of the cost of upgrades for dam owners that are political subdivisions of the state, water user associations, or nonprofit water companies.

Following is a list of the dams that: 1) have been upgraded and now meet state requirements; 2) are currently being upgraded; or 3) are scheduled for upgrading within the next two years.



#	DAM	USE	OWNER/ORGANIZATION	STATUS
1/1/2009				
1	ADAMS	IRR	KAYS CREEK I.C.	COMPLY
2	BINGHAM CREEK	COMM	KENNECOTT	COMPLY
3	CITY CREEK	FLOOD	ST GEORGE CITY	COMPLY
4	CUTLER	HYDRO	PC (UP&L)	COMPLY
5	DRY CANYON	FLOOD	LINDON CITY	COMPLY
6	ELECTRIC LAKE	COMM	PC (UP&L)	COMPLY
7	FARMINGTON POND	FLOOD	DAVIS COUNTY	COMPLY
8	FORSYTH	IRR	FREMONT I.C.	COMPLY
9	GRANTSVILLE	MULTI	GRANTSVILLE I.C.	COMPLY
10	GUNLOCK	MULTI	LOWER GUNLOCK RES. CORP.	COMPLY
11	GUNNISON	IRR	GUNNISON I.C.	COMPLY
12	HOLMES	IRR	HOLMES CREEK I.C.	COMPLY
13	HUNTINGTON	IRR	HUNTINGTON-CLEVELAND I.C.	COMPLY
14	IVINS BENCH	IRR	IVINS I.C.	COMPLY
15	LOGAN 1ST	HYDRO	UTAH STATE UNIVERSITY	COMPLY
16	LONG PARK	IRR	SHEEP CREEK I.C.	COMPLY
17	LOYD'S LAKE	MULTI	SAN JUAN WCD	COMPLY
18	MANTUA	M&I	BRIGHAM CITY	COMPLY
19	MONA	IRR	CURRENT CREEK I.C.	COMPLY
20	MT DELL	M&I	SALT LAKE CITY	COMPLY
21	OTTER CREEK	IRR	OTTER CREEK RES. CO.	COMPLY
22	PORCUPINE	IRR	PORCUPINE RES. CO.	COMPLY
23	QUAIL CREEK (MAIN)	MULTI	WASHINGTON COUNTY WCD	COMPLY
24	QUAIL CREEK (SOUTH)	MULTI	WASHINGTON COUNTY WCD	COMPLY
25	ROCKY FORD (BEAVER)	IRR	ROCKY FORD I.C.	COMPLY
26	SEVIER BRIDGE	IRR	CONS. SEVIER BRIDGE CO.	COMPLY
27	SMITH & MOREHOUSE	MULTI	WEBER BASIN WCD	COMPLY
28	THISTLE	FLOOD	DEPARTMENT OF NATURAL RESOURCES	COMPLY
29	TRIAL LAKE	REC	CENTRAL UTAH WCD	COMPLY
30	TWIN LAKES	IRR	SALT LAKE CITY	COMPLY
31	WARNER DRAW	IRR	ST. GEORGE&WASHINGTON I.C.	COMPLY
32	WITT LAKE	IRR	LAKE CREEK I.C.	COMPLY
33	PIUTE	IRR	PIUTE RES. & I.C.	COMPLY
34	RECAPTURE	MULTI	SJWCD	COMPLY
35	THREE CREEKS (BEAVER)	IRR	KENTS LAKE I.C.	COMPLY
36	DMAD	IRR	DMAD CO.	CONSTRUCTION '05
37	ENTERPRISE (UPPER)	IRR	ENTERPRISE RES & CNL CO.	CONSTRUCTION '07
38	MILL HOLLOW	REC	WILDLIFE RESOURCES	CONSTRUCTION '08
39	WIDE HOLLOW	IRR	NEW ESCALANTE I.C.	CONSTRUCTION '09
40	ENTERPRISE (LOWER)	IRR	ENTERPRISE RES & CNL CO.	DESIGN 2008
41	MILLER FLAT	IRR	HUNTINGTON-CLEVELAND I.C.	DESIGN 2008
42	KAYSVILLE	IRR	KAYSVILLE IRR CO.	DESIGN 2008



BOARD OF WATER RESOURCES

Revolving Construction Fund

**Interim Funding Status
February 2, 2009**

Funds Available for Projects This FY **\$ 1,568,000**

Projects Contracted This FY

1 Glenwood Irr Co	E221		\$ 128,000
2 Kaysville Irr Co	C037	** Loan	738,000
3 Rocky Ford Irr Co (Amend)	E213		57,900
4 Whispering Pines Water Co	E237		153,000
5 Enterprise Res & Canal Co(Upper Enterprise)	C036	** Grant	855,000
6 Enterprise Res & Canal Co(Upper Enterprise)	C036	** Loan	45,000
7 Kays Creek Irr Co	E235		192,000
8 Rocky Ford Irr Co (Rocky Ford Dam-Amend)	C010	** Grant	43,700
9 Weber Basin WCD (Smith & Morehouse)	C038	** Grant	304,000
10 North Union Irr Co	E251		204,000
11 Gunnison Fayette Canal Co	E242		<u>130,000</u>
Total Funds Contracted			\$ 2,851,000
Funds Balance			\$ (1,283,000)

Projects with Funds Committed

1 Sevier Valley Cnl Co	E197		\$ 195,500
2 South Cove Culinary Water Co	E222		66,000
* 3 North Six-Mile Creek Irr Co	E255		51,000
* 4 Kaysville Irr Co (Amend)	C037	** Loan	<u>1,422,000</u>
Total Funds Committed			\$ 1,735,000
Funds Balance			\$ (3,018,000)

Projects Authorized

1 Old Meadow Ranchos C&W Co	E210		\$ 68,000
2 Grave Yard Irr Co	E204		19,500
3 New Escalante Irr Co	E077		300,000
4 Horseshoe Irr Co	E243		<u>340,850</u>
Total Funds Authorized			\$ 728,000
Remaining Funds Available			# \$ (3,746,000)

* To be presented at next Board Meeting
** Dam Safety Projects

End of year balance if all listed projects were fully paid



BOARD OF WATER RESOURCES

Cities Water Loan Fund

**Interim Funding Status
February 2, 2009**

Funds Available for Projects This FY		\$ 6,215,000
Bonds Closed This FY		
1 Deweyville, Town of	L557	\$ 520,000
Total Bonds Closed		\$ 520,000
Funds Balance		\$ 5,695,000
Projects with Funds Committed		
* 1 Honeyville City	L562	\$ 320,000
Total Funds Committed		\$ 320,000
Funds Balance		\$ 5,375,000
Projects Authorized		
1 Garland City	L563	\$ 850,000
2 Weber Basin WCD (Ph 2)	E225	4,000,000
Total Funds Authorized		\$ 4,850,000
Remaining Funds Available		# \$ 525,000

* To be presented at next Board Meeting

End of year balance if all listed projects were fully paid



BOARD OF WATER RESOURCES

Conservation & Development Fund

**Interim Funding Status
February 2, 2009**

Funds Available for Projects This FY \$ 35,955,000

Projects Contracted/Bonds Closed This FY

1 Wayne County (Re-committal)	E219	\$ 1,346,000
2 South Weber Irr Co (Amend)	E208	71,000
3 Garfield County School Dist	E220	459,000
4 Davis & Weber Counties Cnl Co(Cnl Rehab)	E123R6	3,200,000
5 Davis & Weber Counties Cnl Co(Amend)	E215R5	850,000
6 Brigham City	L560	6,000,000
7 Brigham City (Funds from Legislature)	L560	7,900,000
8 Cub River Irr Co	E233	1,600,000
9 Hooper Irr Co	E238	4,770,000
10 Lake Powell & Bear River (Amends)		<u>11,603,700</u>
Total Funds Contracted/Closed		\$ 37,800,000
Funds Balance		\$ (1,845,000)

Projects with Funds Committed

1 Lake Creek Irr Co (Ph 1)	E102	\$ 22,500
2 Saratoga Springs City (Bond Ins Grant)	E218	117,000
3 West Bountiful City (Bond Ins Grant)	L561	92,000
4 Bell Canyon Irr Co	E245	540,000
* 5 Weber Basin WCD	E029R2	1,250,000
* 6 South Weber Irr Co (Amend)	E208	33,000
* 7 Pine Valley Irr Co	E254	<u>635,000</u>
Total Funds Committed		\$ 2,690,000
Funds Balance		\$ (4,535,000)

Projects Authorized

1 Strawberry High Line Canal Co	D976	\$ 3,187,000
2 Richland Nonprofit Water Co	E087	335,000
3 Lake Creek Irr Co (Ph 2)	E102	300,000
4 Provo River Water Users Association	E177	60,000,000
5 Whiterocks Irr Co	E084	4,955,000
6 Central Utah W C D	E205	60,000,000
7 Weber Basin WCD (Ph3+)	E225	52,035,000
8 Brooklyn Canal Co	E223	1,000,000
9 St George & Washington Canal Co	E129	2,450,000
10 Mapleton City	E232	1,900,000
11 Uintah Water Conservancy Dist	E212	4,370,000
12 Davis & Weber Counties Cnl Co(Cnl Rehab)	E123	14,648,000
13 Settlement Canyon Irr Co (Phase 1)	E240	891,400
14 Settlement Canyon Irr Co (Phase 2)	E240	552,500
15 Muddy Creek Irr Co	E248	625,000
16 Park City Municipal Corp	L564	28,200,000
* 17 Midvalley Estates Water Co	E252	<u>434,000</u>
Total Funds Authorized		\$ 235,883,000
Remaining Funds Available		# \$ (240,418,000)

* To be presented at next Board Meeting

End of year balance if all listed projects were fully paid



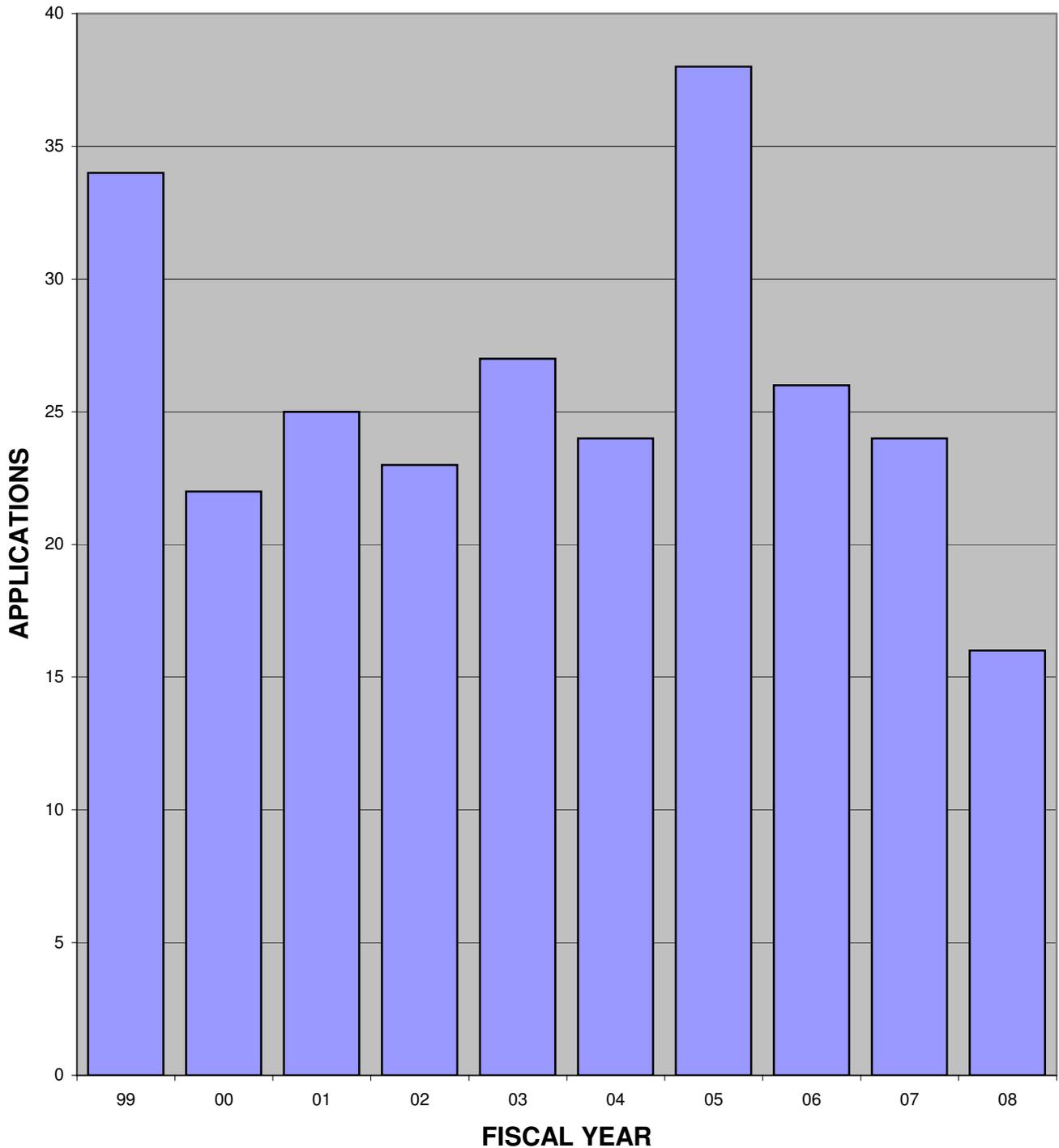
BOARD OF WATER RESOURCES

Additional Future Fundings Needs

Projects		Fund	County	Est. Board Cost	Total Cost
1 Blue Creek Irr Co	E239	RCF	Box Elder	\$ 37,500	\$ 50,000
2 Corinne City	E216	C&D	Box Elder	80,000	100,000
3 West Corinne Water Co	E249	C&D	Box Elder	2,733,750	3,645,000
4 Hyrum Blacksmith Fork Irr Co	E047	C&D	Cache	1,230,000	1,640,000
5 Davis & Weber Counties Cnl Co (Secondary)	D674	C&D	Davis	2,590,000	3,047,000
6 Weber Basin WCD (Secondary Irr, Ph 3-5)	E029	C&D	Davis	28,369,000	33,375,000
7 West Bountiful City	L561	CWL	Davis	2,625,000	3,500,000
8 Cottonwood Creek Consolidated Irr Co	E125	C&D	Emery	3,750,000	5,000,000
9 Ferron Canal & Res Co	E082	C&D	Emery	2,625,000	3,500,000
10 Barton-LeFevre-Tebbs Co	E229	RCF	Garfield	487,500	650,000
11 Parowan City (Bond Ins Grant)	E121	C&D	Iron	34,000	2,034,000
12 East Juab County WCD	E071	C&D	Juab	375,000	500,000
13 Kane County WCD	D828	C&D	Kane	1,500,000	2,000,000
14 Kane County WCD	E253	C&D	Kane	3,345,000	4,460,000
15 Bullion Creek Irr Co	E172	RCF	Piute	75,000	100,000
16 Greenwich Water Works Co	E171	RCF	Piute	112,500	250,000
17 Kingston Irr Water Co	E169	RCF	Piute	85,000	240,000
18 Thompson Ditch Co	E227	RCF	Piute	142,500	190,000
19 Keith Johnson	D996	RCF	Rich	37,500	50,000
20 Woodruff Irrigating Co	D680	C&D	Rich	600,000	800,000
21 Midvale City	L556	C&D	Salt Lake	7,125,000	9,500,000
22 San Juan WCD	E198	C&D	San Juan	3,000,000	4,000,000
23 Devil's Pass Water Co	E226	RCF	Sanpete	157,500	210,000
24 Fountain Green Irr Co (Flow Augment)	E186	RCF	Sanpete	75,000	100,000
25 Mayfield Irr Co	E067	RCF	Sanpete	187,500	250,000
26 Moroni Irr Co	E231	C&D	Sanpete	3,997,500	5,330,000
27 Monroe South Bend Canal Co	E247	RCF	Sevier	287,250	383,000
28 Beaver/ Shingle Creek Irr Co	E241	RCF	Summit	400,000	800,000
29 Oakley City	E250	C&D	Summit	4,987,500	6,650,000
30 Grantsville Irr Co	E150	C&D	Tooele	321,000	428,000
31 Vernon Irr Co	E158	RCF	Tooele	37,500	50,000
32 Leota Irr Co, Inc	E207	C&D	Uintah	2,800,000	3,500,000
33 West Field Irr Co	E217	RCF	Utah	68,000	85,000
34 Wallsburg Irr Co	E203	RCF	Wasatch	90,000	120,000
35 Fremont Irr Co	E131	C&D	Wayne	1,500,000	2,000,000
36 Hooper Irr Co (Press Irr, Ph 4)	E060	C&D	Weber	11,033,000	12,980,000
37 Weber-Box Elder Conservation Dist	E113	C&D	Weber	9,750,000	13,000,000
Subtotal				\$ 96,651,000	\$ 124,517,000



BOARD OF WATER RESOURCES Applications Received





BOARD OF WATER RESOURCES

Projects Funded FY 2008

Sponsor	County	Board Funds
Revolving Construction Fund		
Mosby Irr Co (Amend)	Uintah	\$ 4,360,000
North Creek Irr Co	Beaver	288,000
Providence-Logan Irr Co	Cache	193,000
Rocky Ford Irr Co	Beaver	87,300
Twin Creek Irr Co	Sanpete	475,000
Deseret Irr Co	Millard	96,000
North Creek Irr Co (Amend)	Beaver	54,000
Providence-Logan Irr Co	Cache	15,300
Fountain Green Irr Co	Sanpete	230,000
Utland Ditch Co	Duchesne	270,000
RCF Subotal		\$ 6,068,600
Revolving Construction Fund (Dam Safety)		
Enterprise Res & Cnl Co (Upper Ent Dam)	Grant Washington	2,840,000
Enterprise Res & Cnl Co (Upper Ent Dam)	Loan Washington	160,000
DMAD Company (DMAD Dam)	Grant Davis	522,500
Division of Wildlife Res (Mill Hollow Dam)	Grant Davis	1,440,000
New Escalante Irr Co (Wide Hollow Dam)	Grant Garfield	7,020,000
Dam Safety Total		\$ 11,982,500
RCF TOTAL		\$ 18,051,100
Cities Water Loan Fund		
Weber-Box Elder Conservation Dist	Weber	\$ 233,000
Centerfield Town	Sanpete	255,000
CWL TOTAL		\$ 488,000
Conservation & Development Fund		
Magna Water Co an Improvement Dist	Salt Lake	\$ 7,100,000
Ephraim Irr Co (Amend)	Sanpete	120,000
South Jordan City (Bond Ins Grant)	Salt Lake	45,000
Weber Basin WCD (Ph 1)	Weber,Davis, S	5,825,000
Clearfield City (Bond Ins Grant)	Davis	24,000
Davis & Weber Counties Cnl Co (Ph 5)	Davis	2,700,000
South Weber Irr Co	Weber	1,216,000
Uintah WCD (Island Ditch)	Uintah	1,122,000
Jordan Valley WCD (Bond Ins Grant)	Weber	225,000
C&D Subotal		\$ 18,377,000
C&D Lake Powell/Bear River Studies		
Lake Powell Pipeline Studies		\$ -
Bear River Development Studies		505,000
Lake Powell/Bear River Total		\$ 505,000
C&D TOTAL		\$ 18,882,000
GRAND TOTAL		\$ 37,421,100



BOARD OF WATER RESOURCES

SUMMARY OF PROJECT TYPES

1947- FY 2008

Projects With Feature	Project Type	Board Funds
29	Dam Safety Construction Projects	\$ 62,267,251
125	Dams, Dam Repair, Enlargement	107,505,306
50	Diversion Dams	4,753,435
61	Wells	2,389,910
149	Canals and Canal Linings	24,292,442
93	Pipelines	22,029,450
224	Sprinkler Systems	69,703,874
90	Dual Water Systems	107,287,975
431	Municipal and Domestic Systems	166,985,510
59	Miscellaneous	9,268,172
1311	TOTAL	\$ 576,483,325



BOARD OF WATER RESOURCES
APPROPRIATIONS/SALES TAX REVENUES

<u>YEAR</u>	<u>CONSTRUCTION</u>	<u>CITY LOANS</u>	<u>C & D FUND</u>	<u>TOTAL</u>
1947 - 1949	\$ 1,000,000			\$ 1,000,000
1951 - 1953	500,000			500,000
1953 - 1955	250,000			250,000
1955 - 1957	500,000			500,000
1957 - 1959	1,000,000			1,000,000
1959 - 1961	750,000			750,000
1963 - 1965	1,000,000			1,000,000
1965 - 1967	900,000			900,000
1967 - 1969	576,000			576,000
1969 - 1970	300,000			300,000
1970 - 1971	392,000			392,000
1971 - 1972	400,000			400,000
1972 - 1973	1,000,000			1,000,000
1973 - 1974	1,500,000			1,500,000
1974 - 1975	1,000,000	\$ 2,000,000		3,000,000
1975 - 1976	1,000,000	0		1,000,000
1976 - 1977	1,500,000	3,500,000		5,000,000
1977 - 1978	5,394,400	1,778,000		7,172,400
1978 - 1979	0	2,000,000	\$ 25,000,000	27,000,000
1979 - 1980	2,390,000	1,901,343	25,000,000	29,291,343
1980 - 1981	1,000,000	1,000,000	0	2,000,000
1981 - 1982	500,000	1,000,000	0	1,500,000
1982 - 1983	500,000	3,000,000	20,000,000	23,500,000
1983 - 1984	5,500,000	2,500,000	0	8,000,000
1984 - 1985	0	1,086,800	0	1,086,800
1985 - 1986	2,000,000	1,250,000	3,000,000	6,250,000
1986 - 1987	0	50,000	0	50,000
1987 - 1988	0	0	0	0
1988 - 1989	0	500,000	0	500,000
1989 - 1990	0	0	14,643,429	14,643,429
1990 - 1991	0	0	0	0
1991 - 1992	0	0	5,800,000	5,800,000
1992 - 1993	300,000 *	0	4,236,000	4,536,000
1993 - 1994	185,000 *	0	398,200	583,200
1994 - 1995	1,300,000 *	0	589,500	1,889,500
1995 - 1996	0	0	2,489,500	2,489,500
1996 - 1997	3,200,000 *	0	2,256,500	5,456,500
1997 - 1998	4,363,000 *	0	5,239,500	9,602,500
1998 - 1999	4,363,000 *	0	6,039,500	10,402,500
1999 - 2000	4,363,000 *	0	5,989,500	10,352,500
2000 - 2001	4,363,000 *	0	5,989,500	10,352,500
2001 - 2002	4,363,000 *	0	4,789,500	9,152,500
2002 - 2003	3,349,100 *	0	439,700	3,788,800
2003 - 2004	4,339,100 *	0	4,418,200	8,757,300
2004 - 2005	4,339,100 *	0	4,418,200	8,757,300
2005 - 2006	4,339,100 *	0	4,418,200	8,757,300
2006 - 2007	4,339,100 *	0	12,924,666 **	17,263,766
2007 - 2008	4,339,100 *	0	11,131,319 **	15,470,419
2008 - 2009	4,339,100 *	0	10,243,200 **	14,582,300
TOTAL	\$ 87,036,100	\$ 21,566,143	\$ 179,454,114	\$ 288,056,357

* Appropriations for Dam Safety Program

** Includes Sales Tax for Lake Powell Pipeline/Bear River Development



BOARD OF WATER RESOURCES

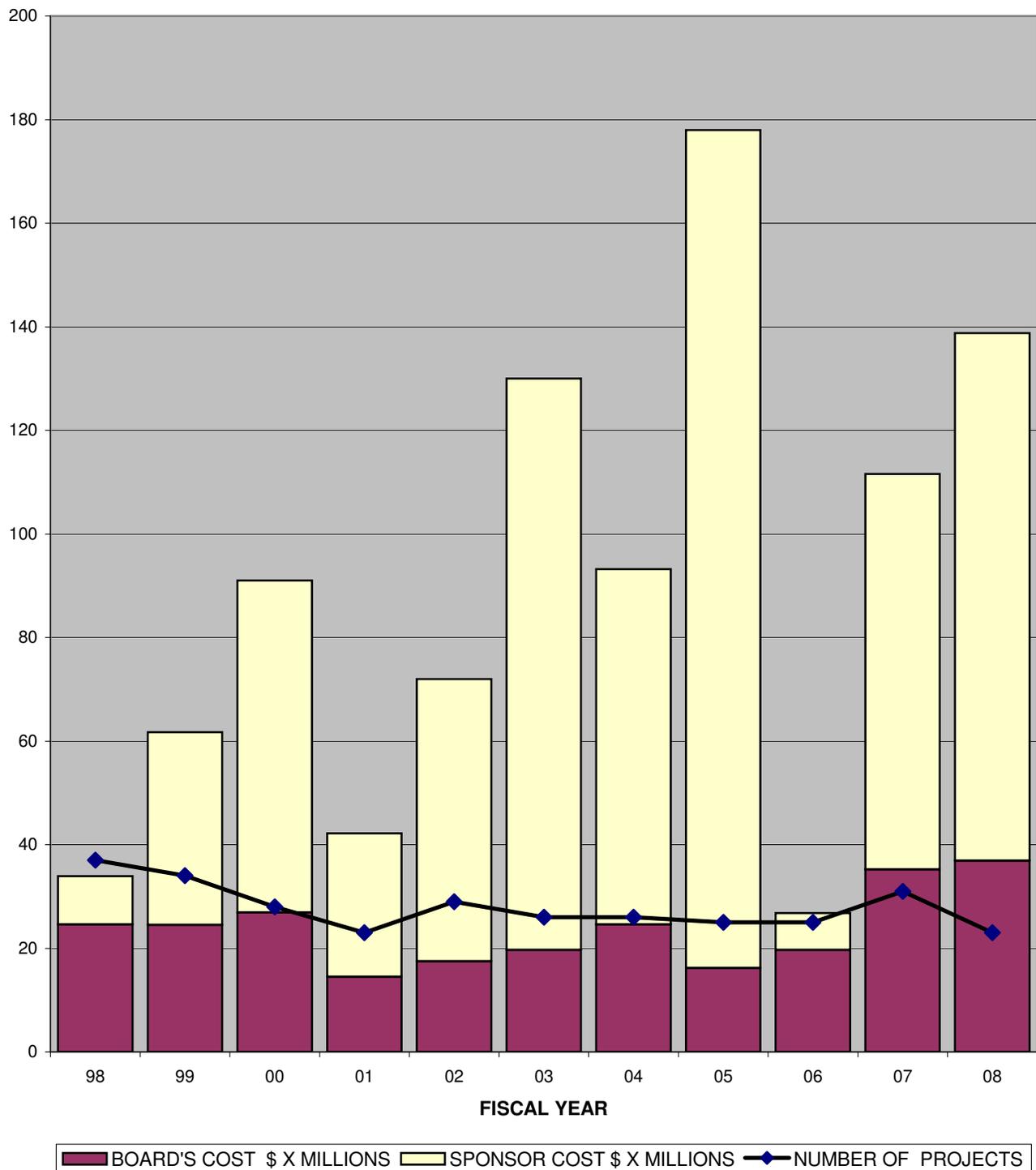
Summary of Funds Invested in Water Development From 1947 through FY 2008

COUNTY	CONSERVATION & DEVELOPMENT			CITIES WATER LOAN			REVOLVING CONSTRUCTION			Total Sum of BOARD \$	Total Sum of TOTAL \$	Total PROJECTS	% OF BOARD FUNDS
	BOARD \$	TOTAL \$	PROJECTS	BOARD \$	TOTAL \$	PROJECTS	BOARD \$	TOTAL \$	PROJECTS				
BEAVER	2,079,000	3,425,761	3	690,000	827,000	3	8,131,819	10,027,835	23	10,900,819	14,280,596	29	1.9
BOX ELDER	5,413,413	7,363,228	8	4,767,002	8,219,523	18	4,497,866	6,222,329	42	14,678,281	21,805,080	68	2.5
CACHE	9,612,139	18,695,310	18	6,718,985	14,047,926	21	12,980,361	16,437,557	40	29,311,485	49,180,793	79	5.1
CARBON	8,935,000	25,299,828	8	4,273,000	11,601,763	9	778,182	1,362,083	13	13,986,182	38,263,674	30	2.4
DAGGETT	0	0	0	471,300	893,300	3	6,944,329	14,271,954	7	7,415,629	15,165,254	10	1.3
DAVIS	44,844,052	76,605,880	24	7,112,400	20,080,032	17	7,156,207	8,433,879	19	59,112,659	105,119,791	60	10.3
DUCHESNE	4,935,704	11,508,886	2	4,533,000	15,963,921	14	2,567,696	6,204,212	17	12,036,400	33,677,019	33	2.1
EMERY	9,200,000	58,454,093	5	1,556,000	3,723,540	6	2,375,019	7,158,313	10	13,131,019	69,335,946	21	2.3
GARFIELD	4,048,851	4,934,706	5	1,162,000	2,464,446	6	10,868,205	14,865,535	26	16,079,056	22,264,687	37	2.8
GRAND	4,775,016	4,775,016	4	817,240	2,031,655	2	357,594	594,740	4	5,949,850	7,401,411	10	1.0
IRON	2,644,552	5,043,012	4	2,314,000	2,887,723	9	2,579,548	3,683,416	19	7,538,100	11,614,151	32	1.3
JUAB	4,045,718	12,754,160	3	654,000	1,451,863	3	8,689,570	10,445,207	32	13,389,288	24,651,230	38	2.3
KANE	1,859,793	1,889,952	2	1,531,000	1,934,239	4	1,414,269	2,190,701	9	4,805,062	6,014,892	15	0.8
MILLARD	0	0	0	2,295,300	7,402,803	13	13,542,890	17,057,566	109	15,838,190	24,460,369	122	2.7
MORGAN	2,841,710	3,210,066	2	300,000	656,000	1	1,110,142	1,880,698	14	4,251,852	5,746,764	17	0.7
PIUTE	0	0	0	0	0	0	11,938,572	13,266,898	14	11,938,572	13,266,898	14	2.1
RICH	580,000	811,044	2	217,000	848,884	3	3,438,834	4,580,642	11	4,235,834	6,240,570	16	0.7
SALT LAKE	35,475,474	416,215,617	21	2,022,000	24,919,650	4	5,867,419	50,562,145	30	43,364,893	491,697,412	55	7.5
SAN JUAN	11,043,753	16,618,241	3	552,000	1,570,112	3	4,713,909	7,854,237	12	16,309,662	26,042,590	18	2.8
SANPETE	13,289,945	22,438,726	18	5,245,700	12,735,847	15	15,588,231	22,977,119	85	34,123,876	58,151,692	118	5.9
SEVIER	2,523,000	4,720,314	4	1,262,867	2,355,894	8	3,871,271	5,744,306	33	7,657,138	12,820,514	45	1.3
SUMMIT	14,354,108	60,070,784	9	12,319,137	17,605,972	16	5,123,225	11,553,346	25	31,796,470	89,230,102	50	5.5
TOOELE	10,648,860	20,736,588	4	433,000	1,629,000	3	3,107,019	4,968,574	28	14,188,879	27,334,162	35	2.5
UINTAH	9,095,602	10,639,199	5	1,454,000	4,435,816	4	10,623,143	15,276,271	19	21,172,745	30,351,286	28	3.7
UTAH	21,172,991	123,454,785	20	5,063,616	38,046,483	16	5,174,209	8,620,535	72	31,410,816	170,121,803	108	5.4
WASATCH	11,245,880	14,083,358	6	0	0	0	3,146,135	4,406,412	22	14,392,015	18,489,770	28	2.5
WASHINGTON	62,518,767	161,108,270	27	4,414,500	14,069,705	16	10,444,177	14,658,513	49	77,377,444	189,836,488	92	13.4
WAYNE	310,000	390,000	1	80,000	390,000	1	4,254,651	7,733,307	38	4,644,651	8,513,307	40	0.8
WEBER	28,309,554	94,118,416	23	1,626,000	4,401,236	7	5,510,904	7,457,455	33	35,446,458	105,977,107	63	6.1
Grand Total	325,802,882	1,179,365,240	231	73,885,047	217,194,333	225	176,796,396	300,495,785	855	576,483,325	1,697,055,358	1,311	100.0

Data



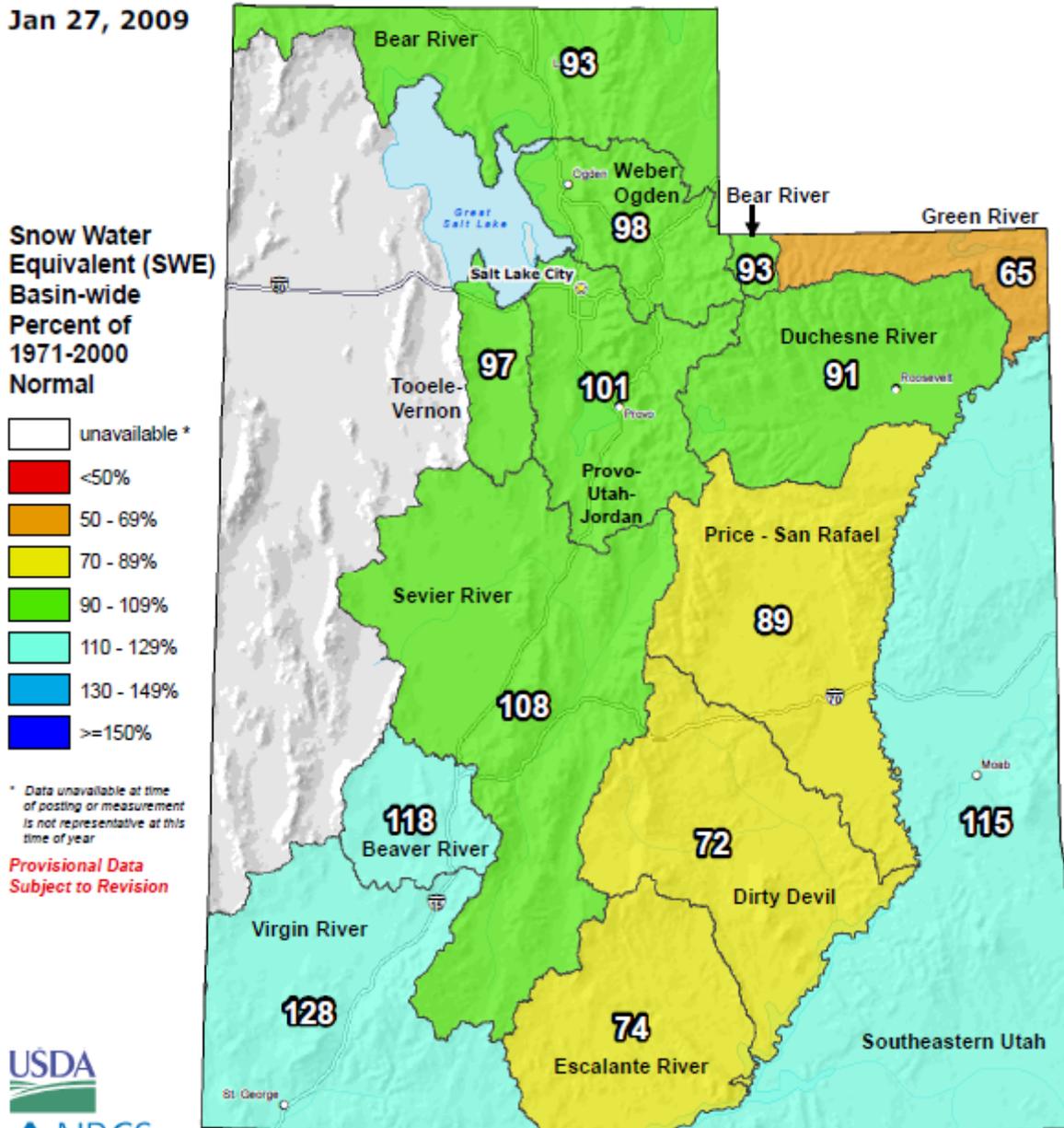
BOARD OF WATER RESOURCES PROJECTS FUNDED



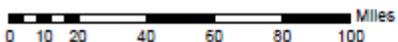


Utah SNOTEL Current Snow Water Equivalent (SWE) % of Normal

Jan 27, 2009



* Data unavailable at time of posting or measurement is not representative at this time of year
*Provisional Data
 Subject to Revision*



The snow water equivalent percent of normal represents the current snow water equivalent found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

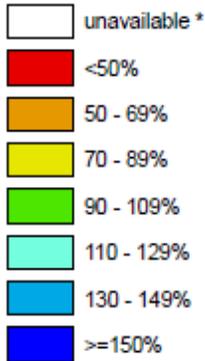
Prepared by the USDA/NRCS National Water and Climate Center
 Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>
 Based on data from <http://www.wcc.nrcs.usda.gov/reports/>
 Science contact: Tom.Pagano@por.usda.gov 503 414 3010



Utah SNOTEL Water Year (Oct 1) to Date Precipitation % of Normal

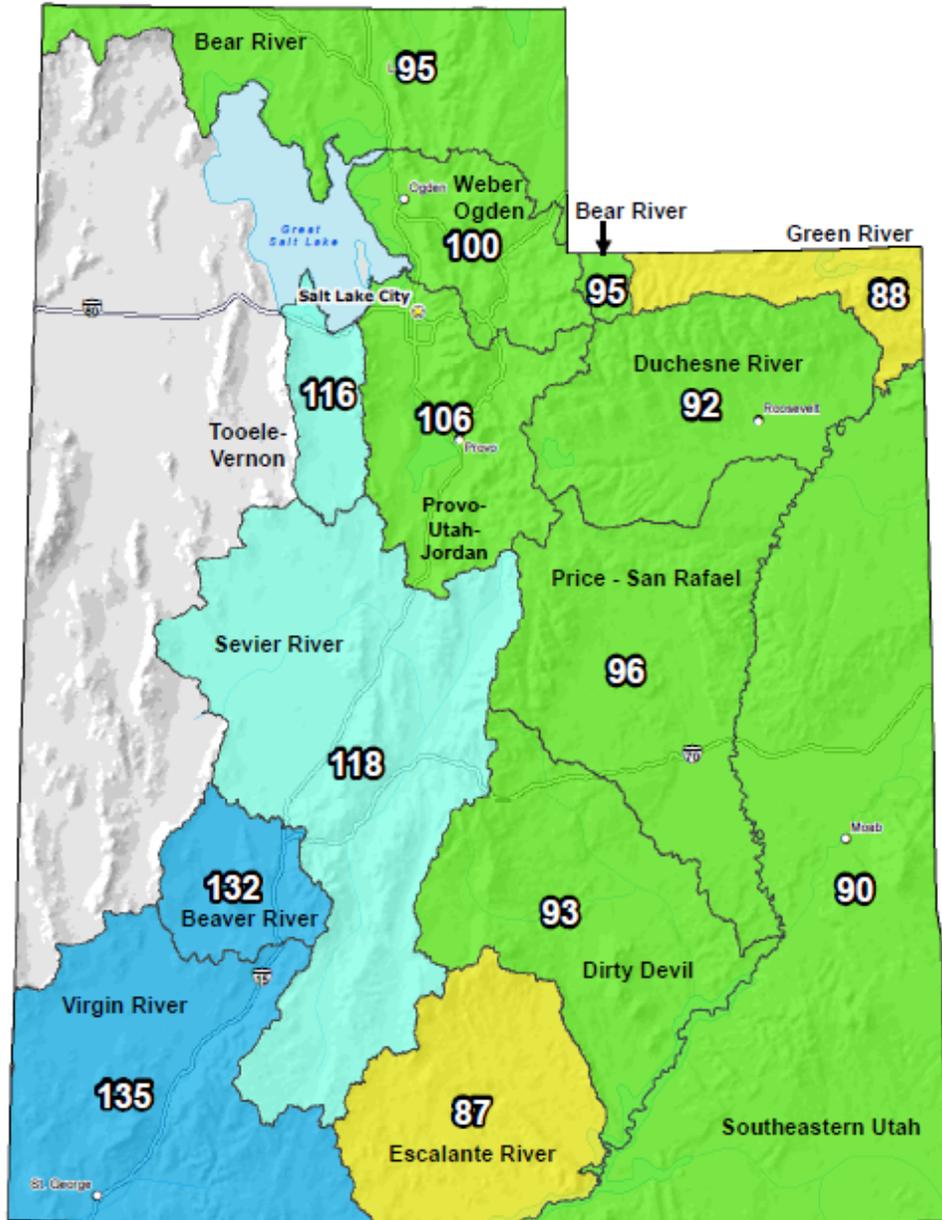
Jan 27, 2009

**Water Year
(Oct 1) to Date
Precipitation
Basin-wide
Percent of
1971-2000
Normal**



* Data unavailable at time of posting or measurement is not representative at this time of year

*Provisional Data
Subject to Revision*

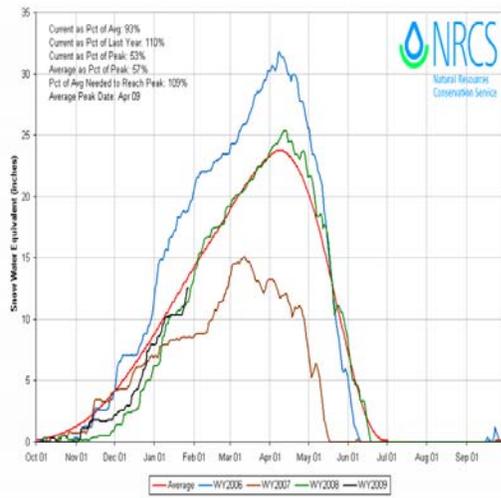


The water year to date precipitation percent of normal represents the accumulated precipitation found at selected SNOTEL sites in or near the basin compared to the average value for those sites on this day. Data based on the first reading of the day (typically 00:00).

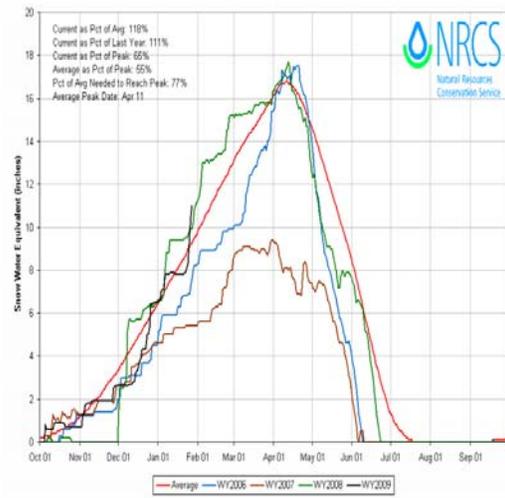
Prepared by the USDA/NRCS National Water and Climate Center
Portland, Oregon <http://www.wcc.nrcs.usda.gov/gis/>
Based on data from <http://www.wcc.nrcs.usda.gov/reports/>
Science contact: Tom.Pagano@por.usda.gov 503 414 3010



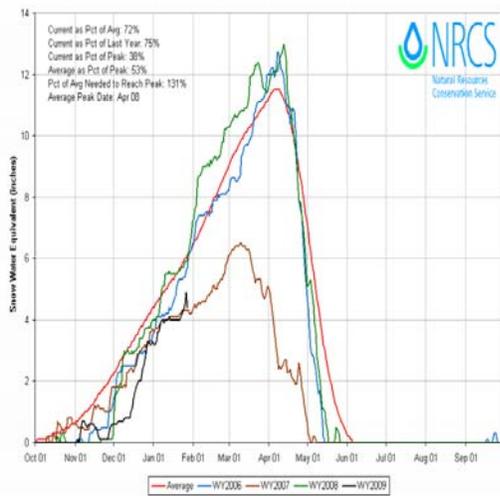
BEAR RIVER IN UTAH Time Series Snowpack Summary
 Based on Provisional SNO1E2 data as of Jan 21, 2009



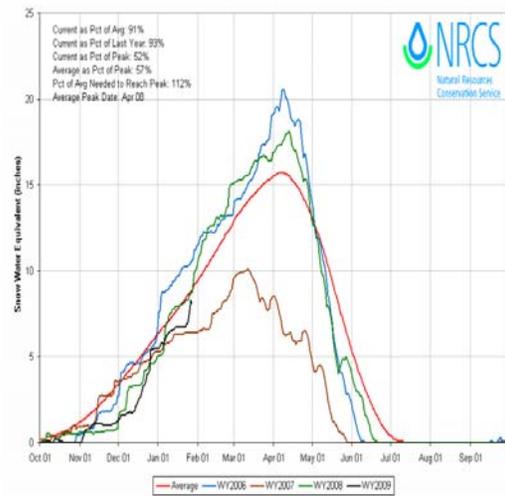
BEAVER RIVER Time Series Snowpack Summary
 Based on Provisional SNO1E2 data as of Jan 21, 2009



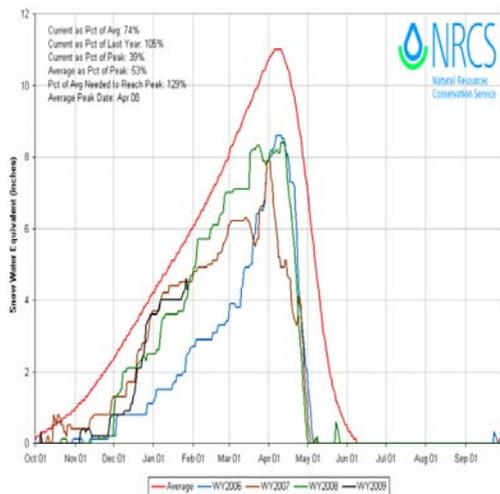
DIRTY DEVIL Time Series Snowpack Summary
 Based on Provisional SNO1E2 data as of Jan 21, 2009



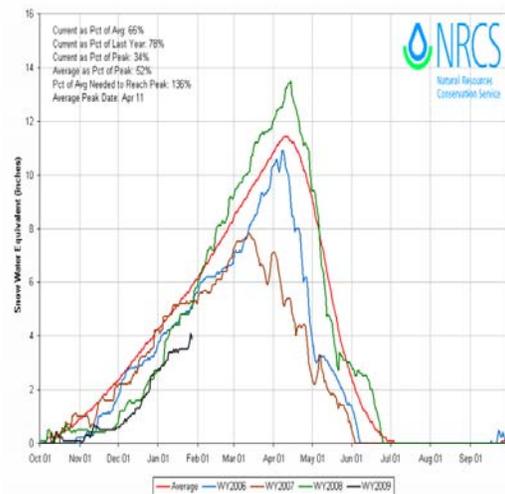
DUCESNE RIVER Time Series Snowpack Summary
 Based on Provisional SNO1E2 data as of Jan 21, 2009



ESCALANTE RIVER Time Series Snowpack Summary
 Based on Provisional SNO1E2 data as of Jan 21, 2009

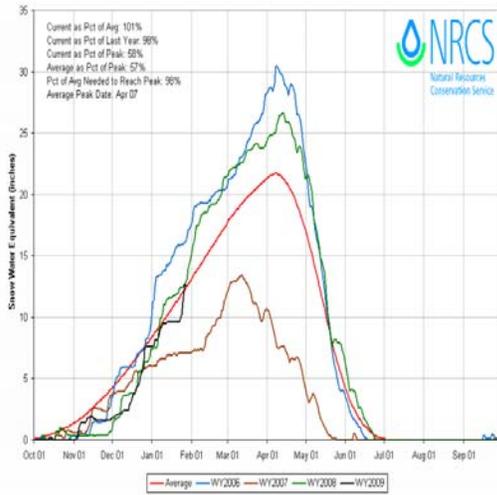


GREEN RIVER Time Series Snowpack Summary
 Based on Provisional SNO1E2 data as of Jan 21, 2009

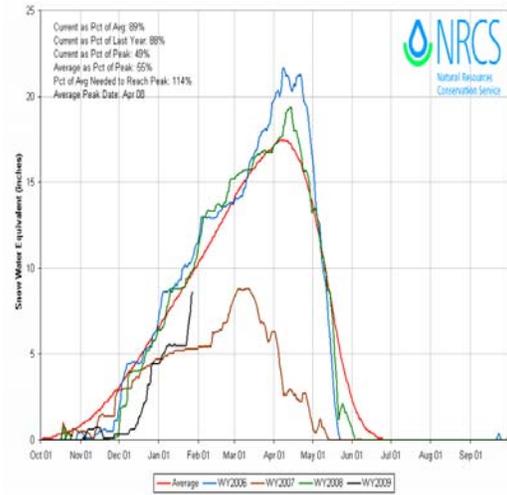




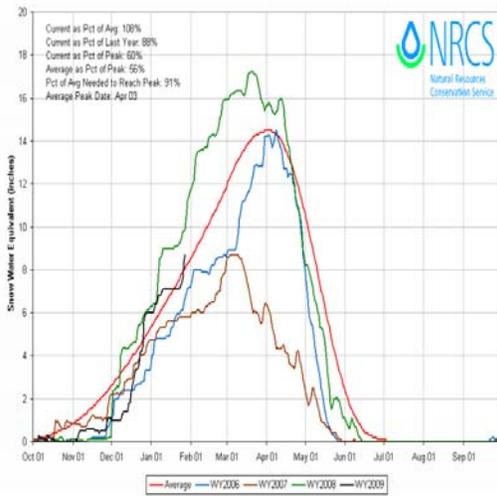
PROVO R-UTAH LAKE-JORDAN R. Time Series Snowpack Summary
Based on Provisional SNO1E1 data as of Jun 27, 2009



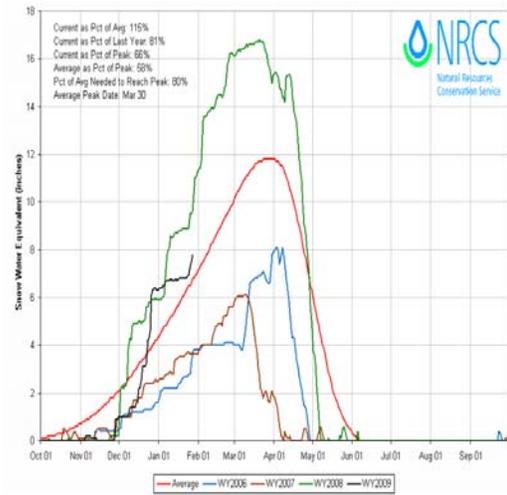
PRICE-SAN RAFAEL Time Series Snowpack Summary
Based on Provisional SNO1E1 data as of Jun 27, 2009



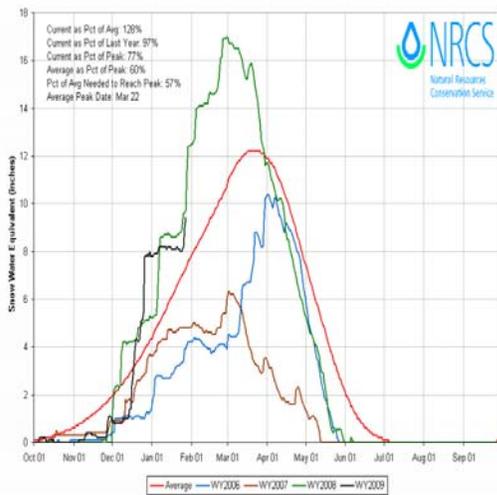
SEVIER RIVER Time Series Snowpack Summary
Based on Provisional SNO1E1 data as of Jun 27, 2009



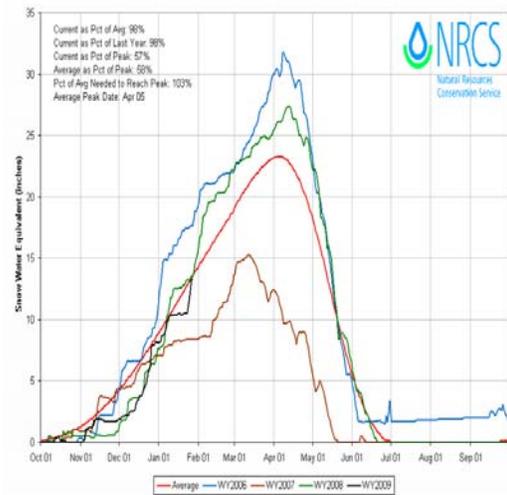
SOUTHEASTERN UTAH Time Series Snowpack Summary
Based on Provisional SNO1E1 data as of Jun 27, 2009



VIRGIN RIVER Time Series Snowpack Summary
Based on Provisional SNO1E1 data as of Jun 27, 2009

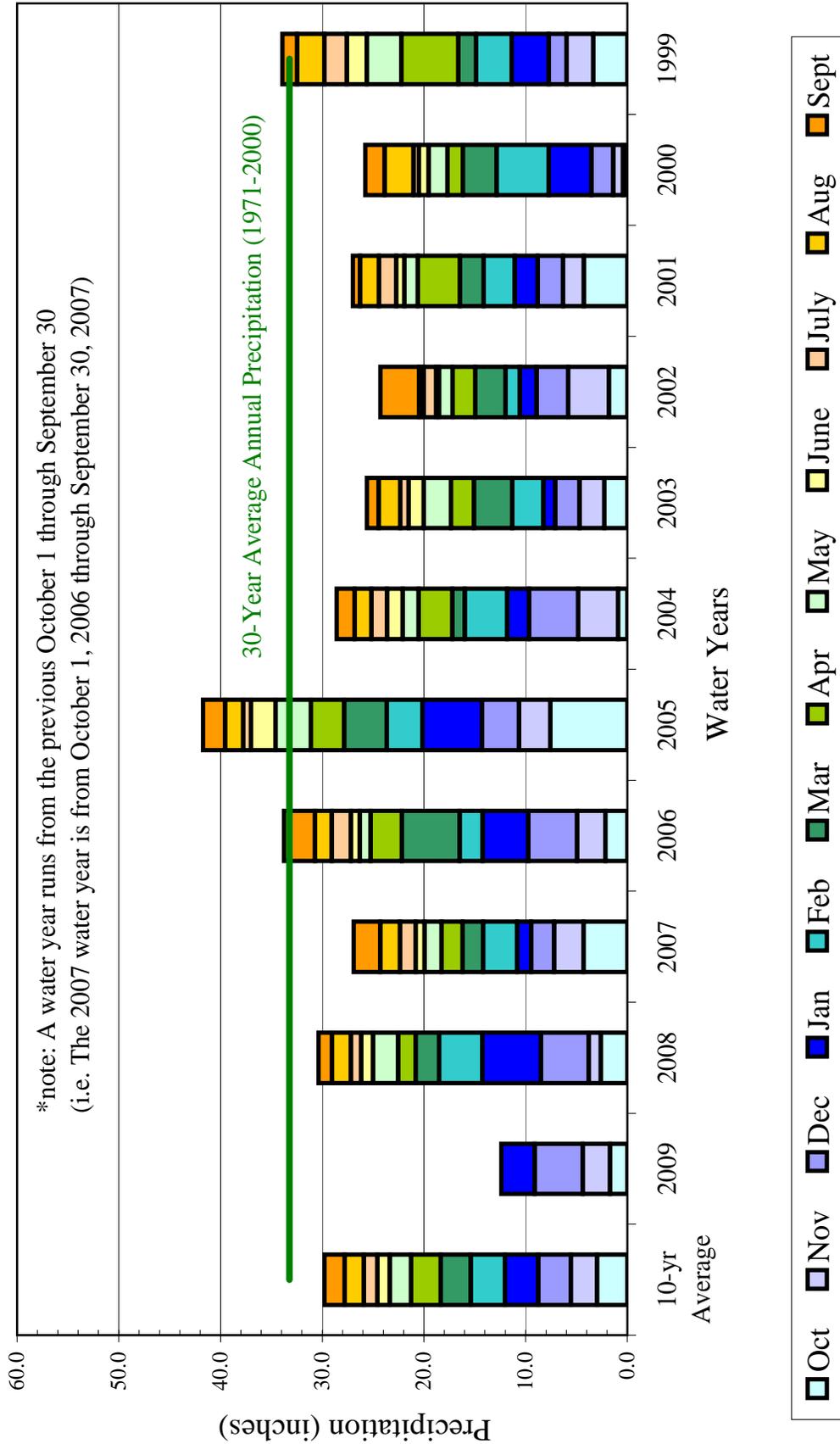


WEBER-OGDEN RIVERS Time Series Snowpack Summary
Based on Provisional SNO1E1 data as of Jun 27, 2009





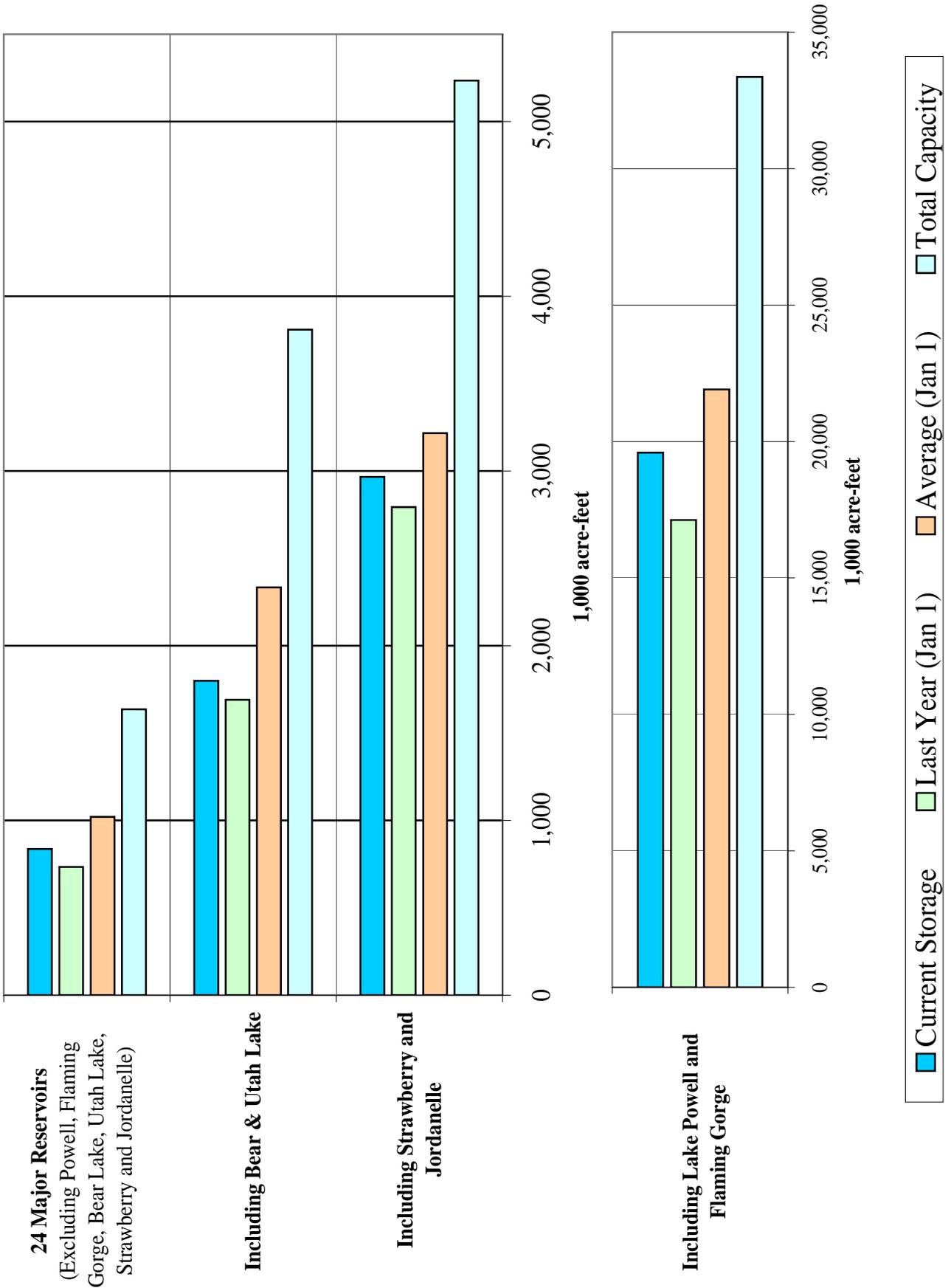
Statewide Average Average Precipitation for 77 Mountain Snotel Sites (Through 1/27/2009)





Statewide Reservoir Storage

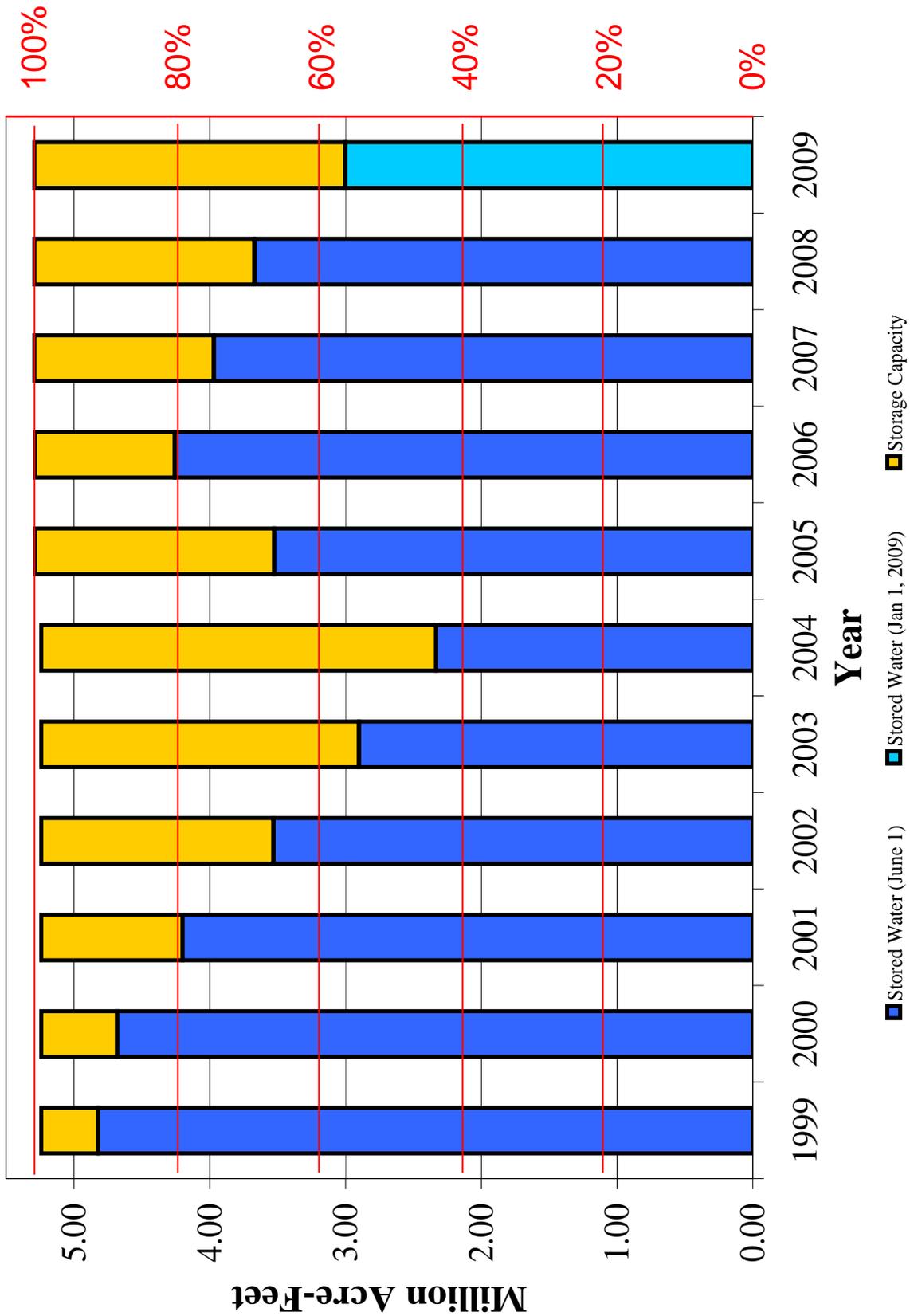
(January 1, 2009)





Utah's Major Storage Reservoirs

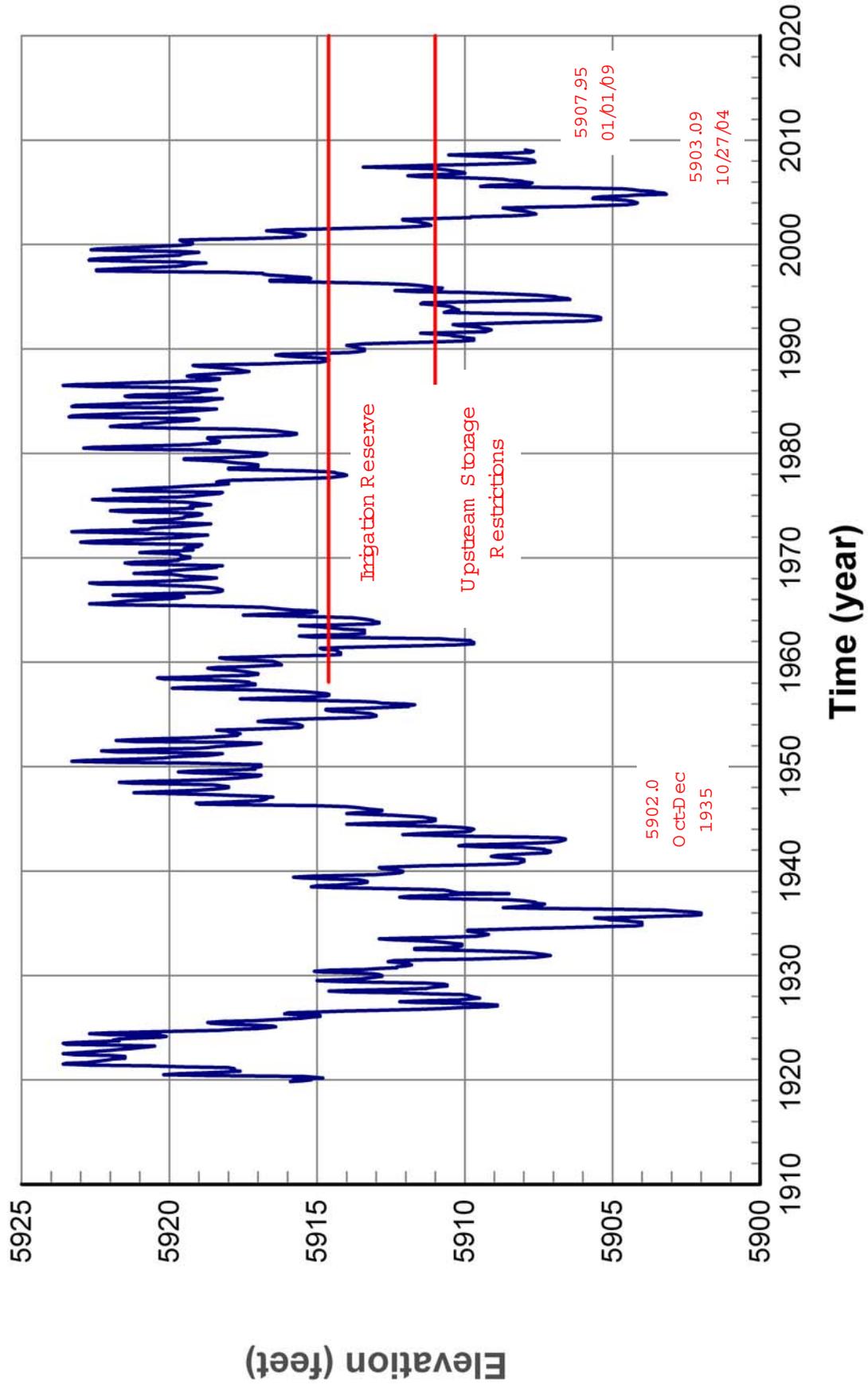
(January 1, 2009)



This graphic now includes Jordanelle and Strawberry Reservoirs. Sand Hollow Reservoir is also included beginning in 2005.

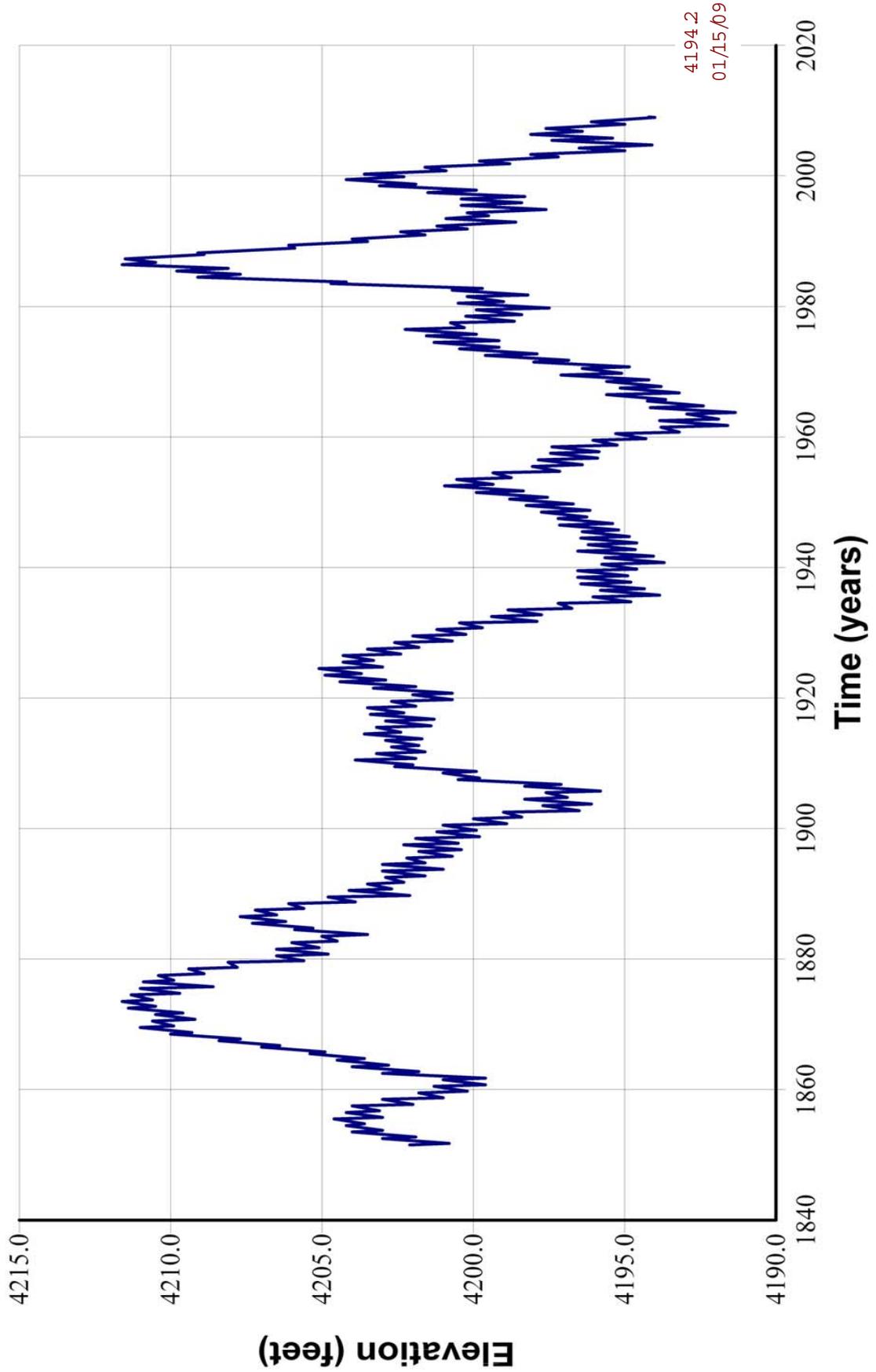


Historical Bear Lake Elevations





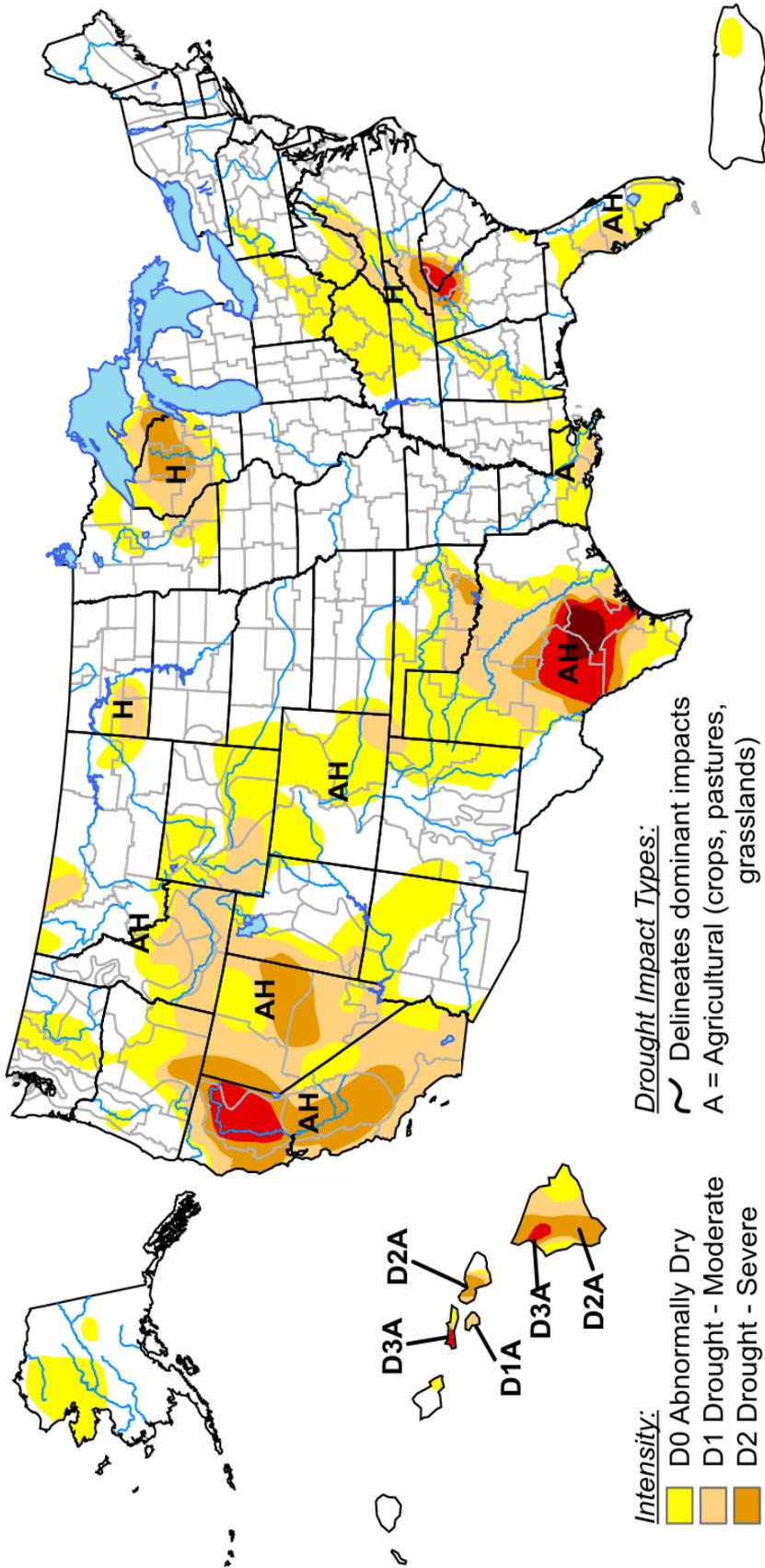
Great Salt Lake Historical Hydrograph





U.S. Drought Monitor

January 20, 2009
Valid 8 a.m. EST



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Released Thursday, January 22, 2009
Author: Laura Edwards, Western Regional Climate Center
<http://drought.unl.edu/dm>



U.S. Drought Monitor

Utah

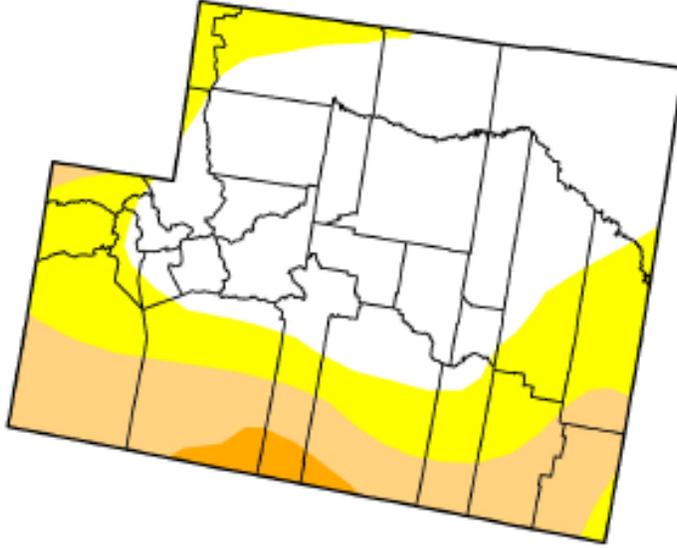
January 20, 2009
Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	53.4	46.6	20.9	2.1	0.0	0.0
Last Week (01/13/2009 map)	53.4	46.6	20.9	2.1	0.0	0.0
3 Months Ago (10/28/2008 map)	53.8	46.2	20.9	2.1	0.0	0.0
Start of Calendar Year (01/06/2009 map)	53.4	46.6	20.9	2.1	0.0	0.0
Start of Water Year (10/07/2008 map)	60.1	39.9	11.9	0.0	0.0	0.0
One Year Ago (01/22/2008 map)	4.2	95.8	84.8	36.3	0.0	0.0

Intensity:

- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

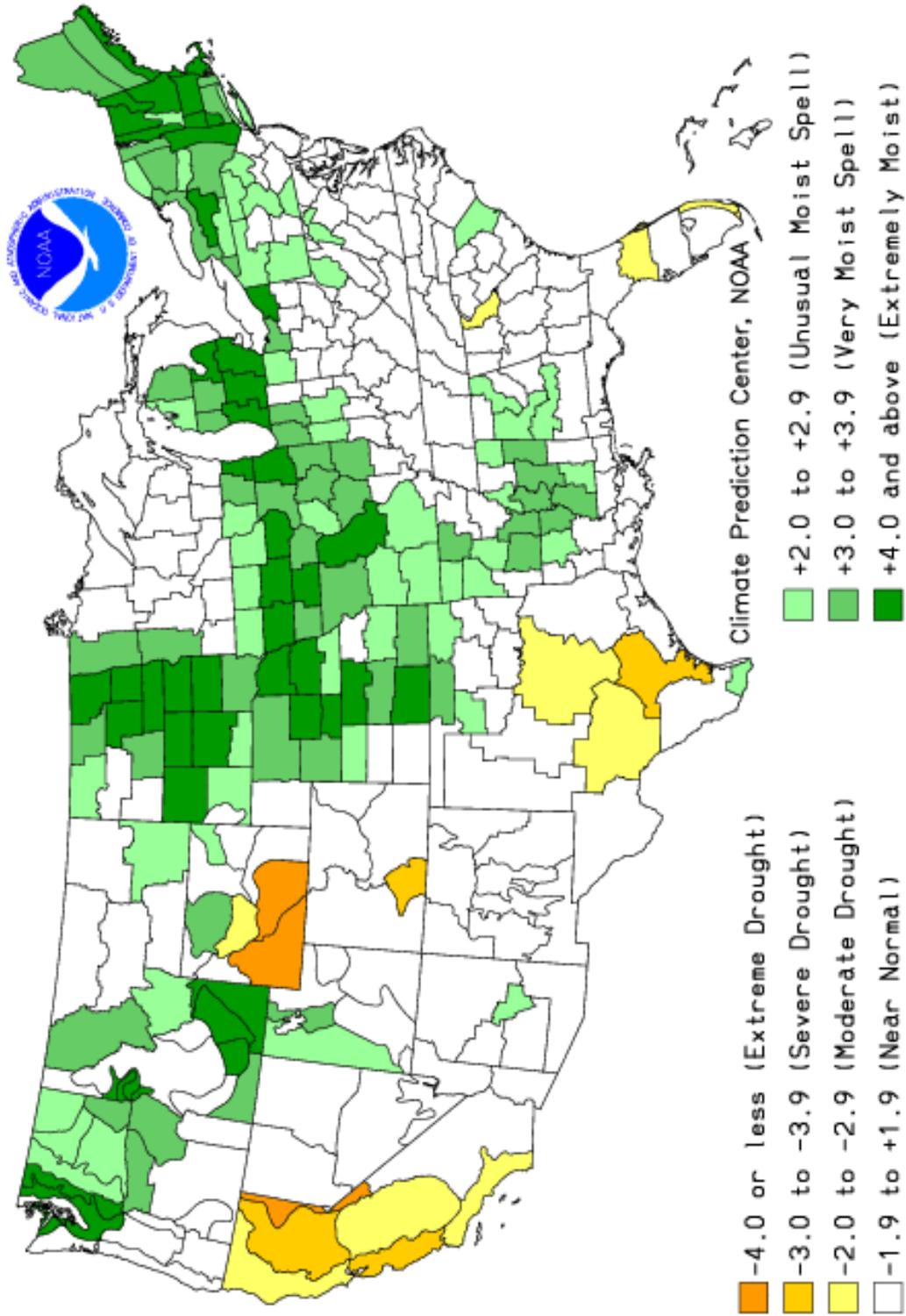


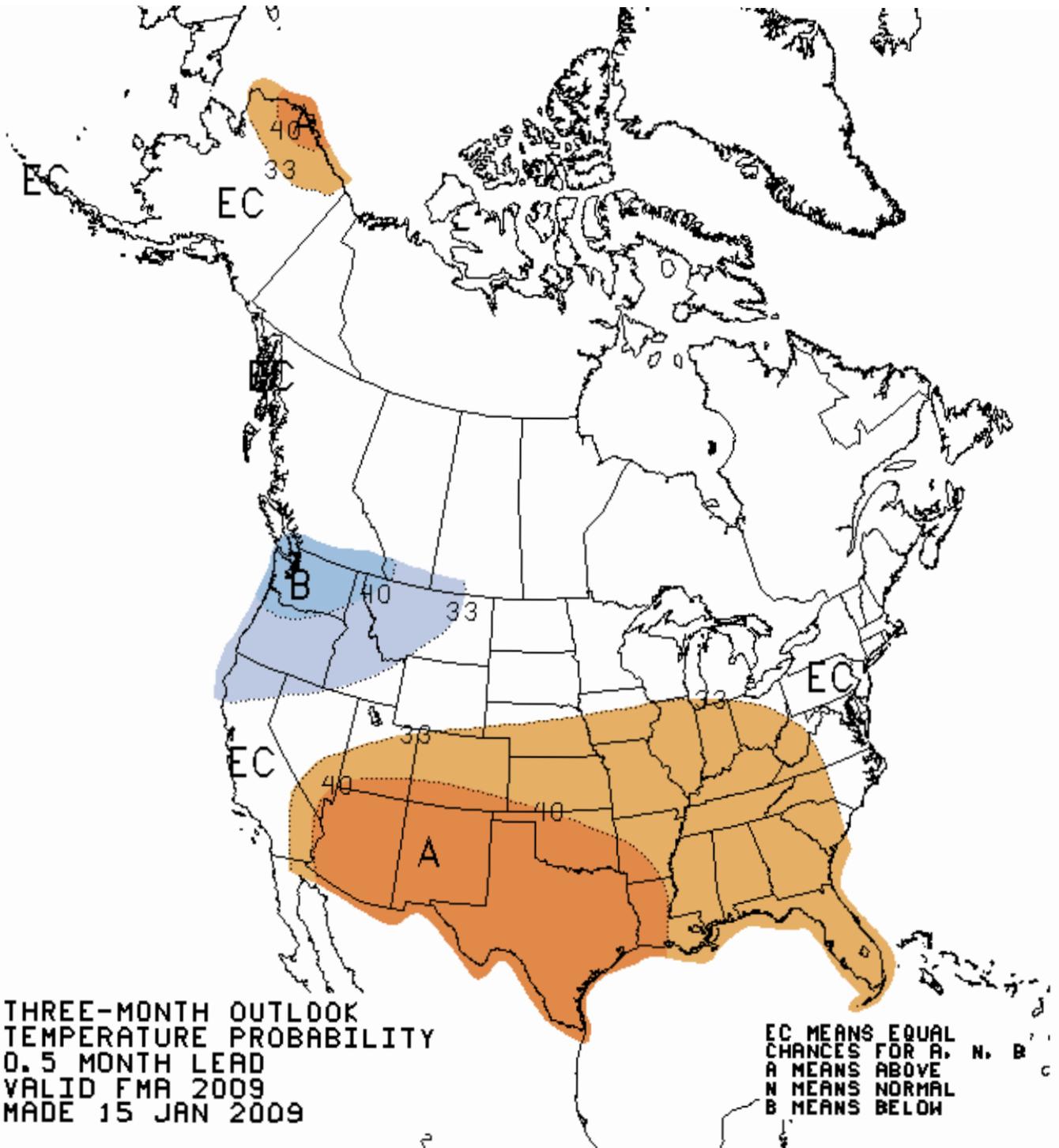
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

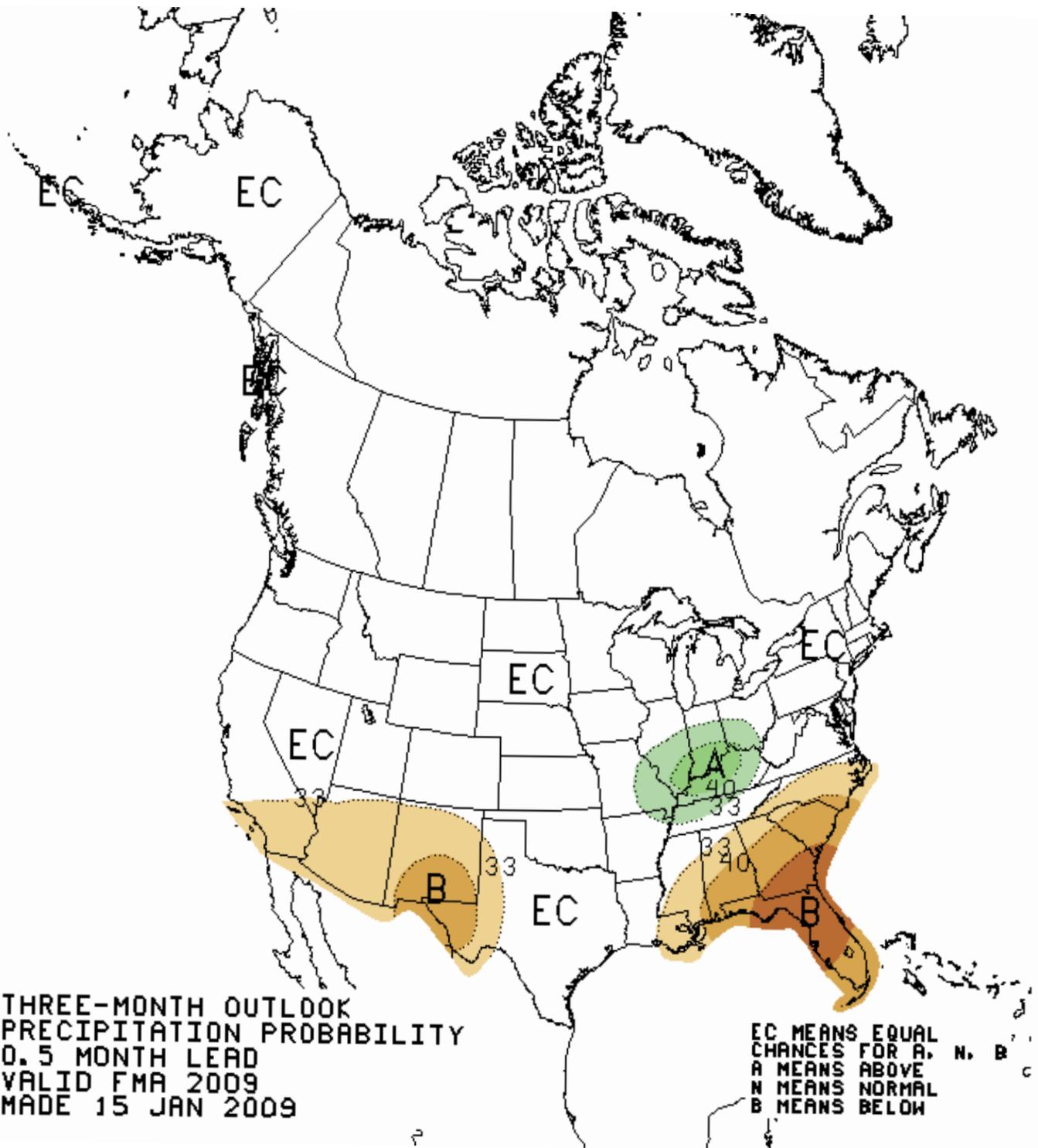
Released Thursday, January 22, 2009
Author: Laura Edwards, Western Regional Climate Center

<http://drought.unl.edu/dm>

Drought Severity Index by Division
Weekly Value for Period Ending JAN 24, 2009
Long Term Palmer

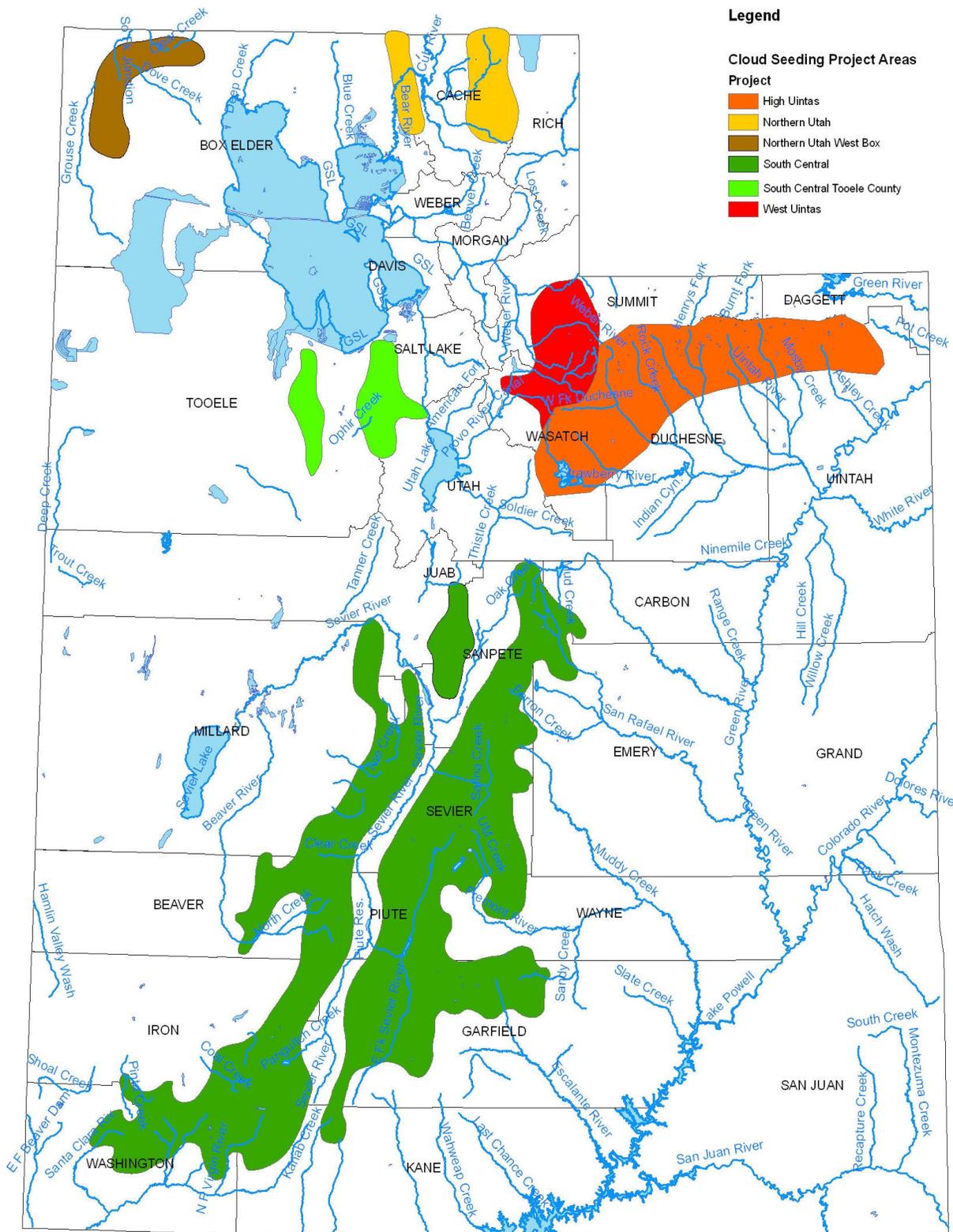








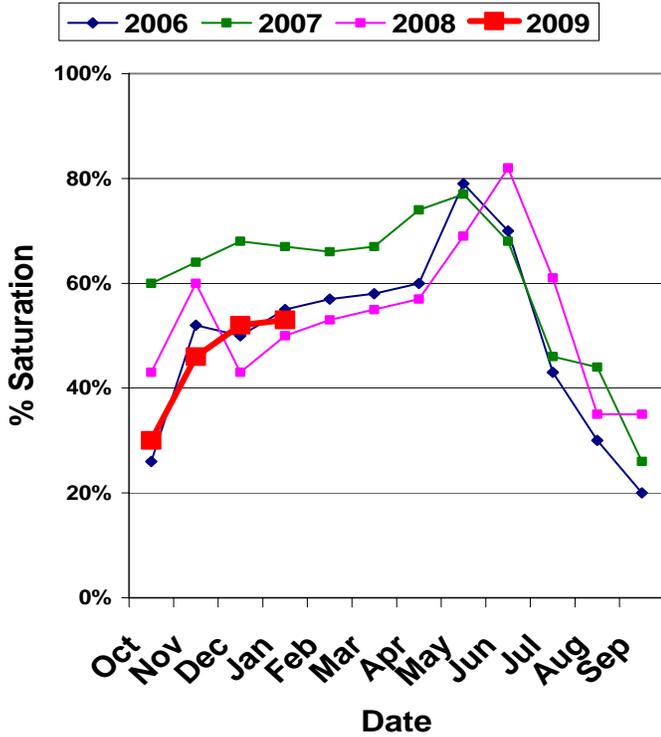
Cloud Seeding Target Areas



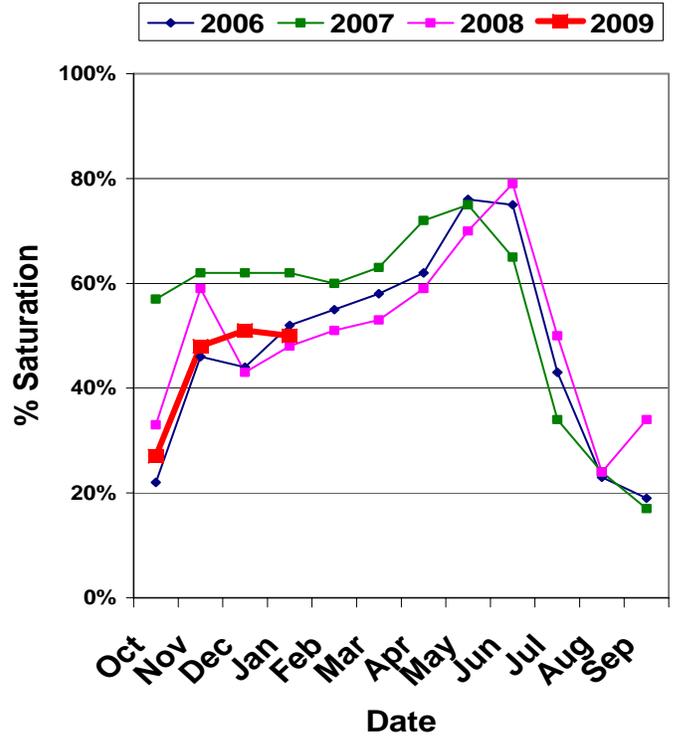


Watershed Soil Moisture Charts for Utah Water Supply

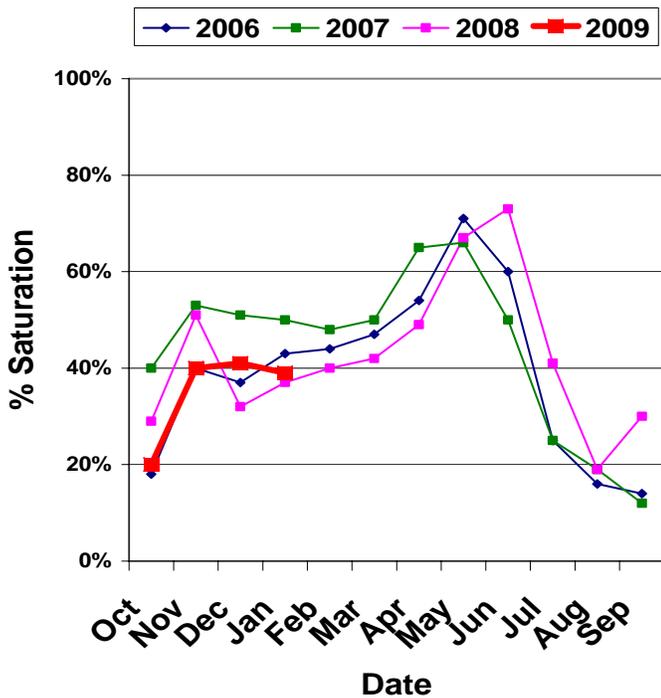
Bear River Soil Moisture



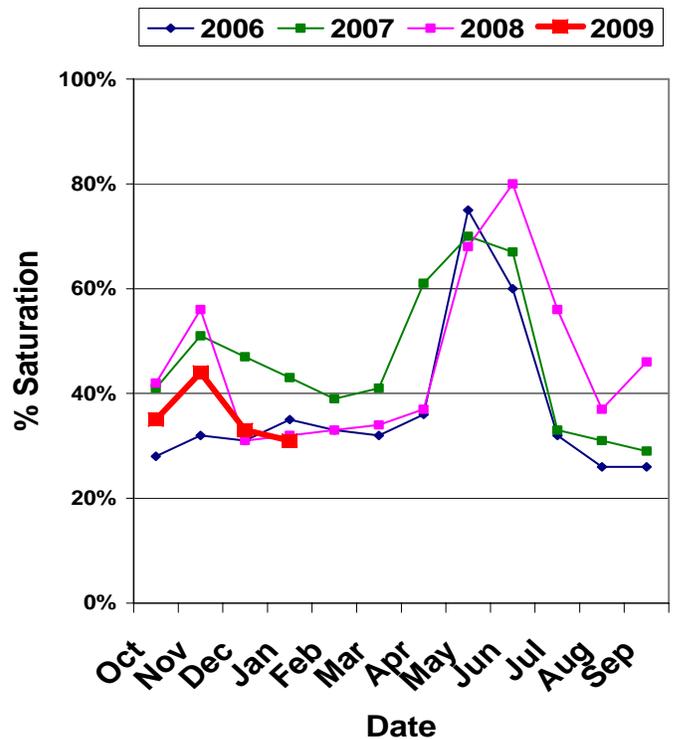
Weber River Soil Moisture



Jordan/Provo River Soil Moisture



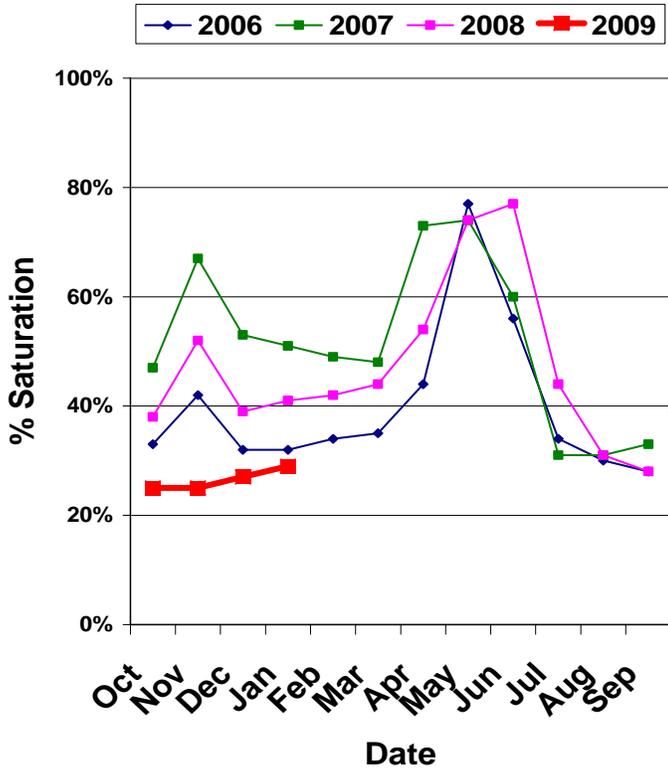
Uintah Basin Soil Moisture



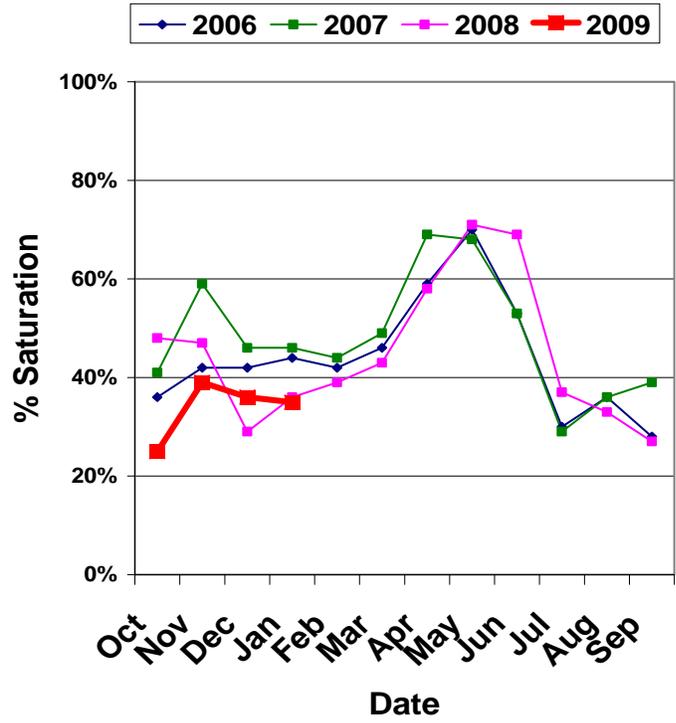


Watershed Soil Moisture Charts for Utah Water Supply

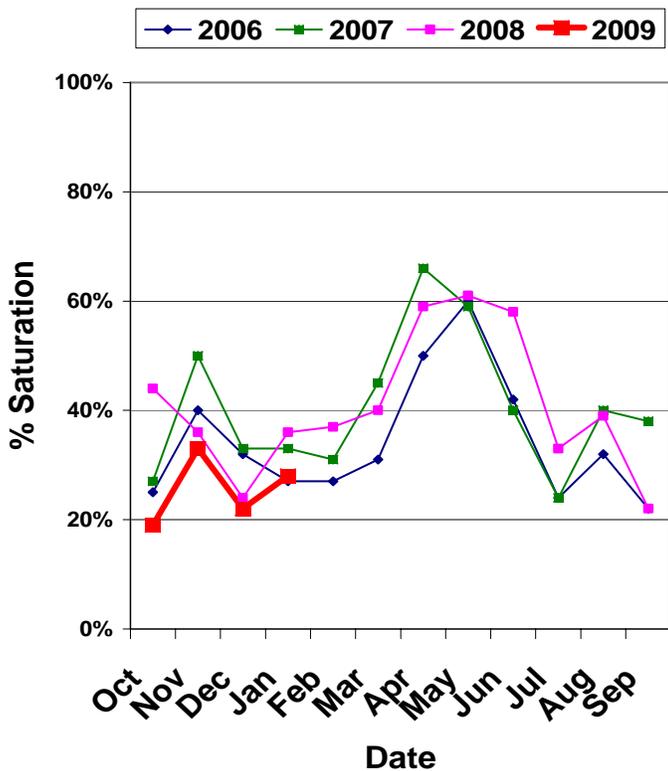
South East Utah Soil Moisture



Sevier/Beaver River Soil Moisture



Southwest Utah Soil Moisture



Statewide Soil Moisture

