

**Application for Federal Assistance SF-424**

* 1. Type of Submission: <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application	* 2. Type of Application: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision	* If Revision, select appropriate letter(s): <input type="text"/> * Other (Specify): <input type="text"/>
--	--	--

* 3. Date Received: <input type="text" value="06/23/2015"/>	4. Applicant Identifier: <input type="text"/>
--	--

5a. Federal Entity Identifier: <input type="text"/>	5b. Federal Award Identifier: <input type="text"/>
--	---

**State Use Only:**

6. Date Received by State: <input type="text"/>	7. State Application Identifier: <input type="text"/>
---	---

**8. APPLICANT INFORMATION:**

* a. Legal Name: <input type="text" value="South Board of Control"/>	
* b. Employer/Taxpayer Identification Number (EIN/TIN): <input type="text" value="82-6000451"/>	* c. Organizational DUNS: <input type="text" value="0603565730000"/>

**d. Address:**

* Street1: <input type="text" value="118 S. 1st St."/>
Street2: <input type="text"/>
* City: <input type="text" value="Homedale"/>
County/Parish: <input type="text"/>
* State: <input type="text" value="ID: Idaho"/>
Province: <input type="text"/>
* Country: <input type="text" value="USA: UNITED STATES"/>
* Zip / Postal Code: <input type="text" value="83628-6034"/>

**e. Organizational Unit:**

Department Name: <input type="text" value="South Board of Control"/>	Division Name: <input type="text"/>
--	-------------------------------------

**f. Name and contact information of person to be contacted on matters involving this application:**

Prefix: <input type="text" value="Mr."/>	* First Name: <input type="text" value="Clancy"/>
Middle Name: <input type="text"/>	
* Last Name: <input type="text" value="Flynn"/>	
Suffix: <input type="text"/>	
Title: <input type="text" value="Manager"/>	

Organizational Affiliation: <input type="text"/>
--

* Telephone Number: <input type="text" value="208-337-3760"/>	Fax Number: <input type="text" value="208-337-5107"/>
---	---

* Email: <input type="text" value="office@southboardofcontrol.com"/>
--

**Application for Federal Assistance SF-424**

**\* 9. Type of Applicant 1: Select Applicant Type:**

D: Special District Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

\* Other (specify):

**\* 10. Name of Federal Agency:**

Bureau of Reclamation

**11. Catalog of Federal Domestic Assistance Number:**

15.514

CFDA Title:

Reclamation States Emergency Drought Relief

**\* 12. Funding Opportunity Number:**

R15AS00046

\* Title:

WaterSMART: Drought Resiliency Project Grants for Fiscal Year 2015

**13. Competition Identification Number:**

Title:

**14. Areas Affected by Project (Cities, Counties, States, etc.):**

Add Attachment

Delete Attachment

View Attachment

**\* 15. Descriptive Title of Applicant's Project:**

Improvement of Gem Irrigation District #2 pumping plant capacity.

Attach supporting documents as specified in agency instructions.

Add Attachments

Delete Attachments

View Attachments

**Application for Federal Assistance SF-424**

**16. Congressional Districts Of:**

\* a. Applicant

\* b. Program/Project

Attach an additional list of Program/Project Congressional Districts if needed.

**17. Proposed Project:**

\* a. Start Date:

\* b. End Date:

**18. Estimated Funding (\$):**

* a. Federal	<input type="text" value="300,000.00"/>
* b. Applicant	<input type="text" value="302,690.00"/>
* c. State	<input type="text" value="0.00"/>
* d. Local	<input type="text" value="0.00"/>
* e. Other	<input type="text" value="0.00"/>
* f. Program Income	<input type="text" value="0.00"/>
* g. TOTAL	<input type="text" value="602,690.00"/>

**\* 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

a. This application was made available to the State under the Executive Order 12372 Process for review on

b. Program is subject to E.O. 12372 but has not been selected by the State for review.

c. Program is not covered by E.O. 12372.

**\* 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

Yes  No

If "Yes", provide explanation and attach

**21. \*By signing this application, I certify (1) to the statements contained in the list of certifications\*\* and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances\*\* and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

\*\* I AGREE

\*\* The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

**Authorized Representative:**

Prefix:  \* First Name:

Middle Name:

\* Last Name:

Suffix:

\* Title:

\* Telephone Number:  Fax Number:

\* Email:

\* Signature of Authorized Representative:  \* Date Signed:

**BUDGET INFORMATION - Construction Programs**

*NOTE: Certain Federal assistance programs require additional computations to arrive at the Federal share of project costs eligible for participation. If such is the case, you will be notified.*

COST CLASSIFICATION	a. Total Cost	b. Costs Not Allowable for Participation	c. Total Allowable Costs (Columns a-b)
1. Administrative and legal expenses	\$ 11,515.00	\$ 2,000.00	\$ 9,515.00
2. Land, structures, rights-of-way, appraisals, etc.	\$	\$	\$
3. Relocation expenses and payments	\$	\$	\$
4. Architectural and engineering fees	\$ 32,000.00	\$	\$ 32,000.00
5. Other architectural and engineering fees	\$	\$	\$
6. Project inspection fees	\$	\$	\$
7. Site work	\$ 195,105.00	\$ 690.00	\$ 194,415.00
8. Demolition and removal	\$ 26,000.00	\$	\$ 26,000.00
9. Construction	\$ 281,540.00	\$	\$ 281,540.00
10. Equipment	\$ 56,530.00	\$	\$ 56,530.00
11. Miscellaneous	\$	\$	\$
12. SUBTOTAL (sum of lines 1-11)	\$ 602,690.00	\$ 2,690.00	\$ 600,000.00
13. Contingencies	\$	\$	\$
14. SUBTOTAL	\$ 602,690.00	\$ 2,690.00	\$ 600,000.00
15. Project (program) income	\$	\$	\$
16. TOTAL PROJECT COSTS (subtract #15 from #14)	\$ 602,690.00	\$ 2,690.00	\$ 600,000.00
<b>FEDERAL FUNDING</b>			
17. Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share.) Enter eligible costs from line 16c Multiply X 50 % Enter the resulting Federal share.			\$ 300,000.00

## ASSURANCES - CONSTRUCTION PROGRAMS

OMB Number: 4040-0009  
Expiration Date: 06/30/2014

Public reporting burden for this collection of information is estimated to average 15 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0042), Washington, DC 20503.

**PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE OFFICE OF MANAGEMENT AND BUDGET. SEND IT TO THE ADDRESS PROVIDED BY THE SPONSORING AGENCY.**

**NOTE:** Certain of these assurances may not be applicable to your project or program. If you have questions, please contact the Awarding Agency. Further, certain Federal assistance awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant:, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance, and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in accordance with generally accepted accounting standards or agency directives.
3. Will not dispose of, modify the use of, or change the terms of the real property title or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure non-discrimination during the useful life of the project.
4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progressive reports and such other information as may be required by the assistance awarding agency or State.
6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. §§4728-4763) relating to prescribed standards of merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. §§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
10. Will comply with all Federal statutes relating to non-discrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681 1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.

Previous Edition Usable

Authorized for Local Reproduction

Standard Form 424D (Rev. 7-97)  
Prescribed by OMB Circular A-102

11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal and federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.
13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333) regarding labor standards for federally-assisted construction subagreements.
14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a-1 et seq).
18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
19. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.
20. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

<b>SIGNATURE OF AUTHORIZED CERTIFYING OFFICIAL</b> Clancy Flynn	<b>TITLE</b> Manager
<b>APPLICANT ORGANIZATION</b> South Board of Control	<b>DATE SUBMITTED</b> 06/23/2015

SF-424D (Rev. 7-97) Back

OWYHEE PROJECT

# Drought Resiliency Project

---

## Application

**South Board of Control Staff**

**6/24/2015**

South Board of Control Drought Resiliency Project proposal and related information for Grant application pursuant to: Funding Opportunity Announcement No. R15AS00047.

# Table of Contents

- I. Technical Proposal
  - A. Executive Summary
  - B. Background Data
  - C. Technical Project Description
  - D. Evaluation Criteria
  - E. Performance Measures
- II. Project Budget
  - a. Funding Plans and letters of commitment
  - b. Budget Proposal
  - c. Budget Narrative
- III. Environmental Compliance
- IV. Required Permits
- V. Appendices
  - i. Drought Contingency Plan
  - ii. Water Right filing
  - iii. Official Resolution
  - iv. Letter of support

## *I. Technical Proposal*

### **A. Executive Summary**

25 June 2015

South Board of Control

Homedale, Owyhee County, Idaho

The South Board of Control (SBOC) is proposing adding a pump capable of pumping 26 CFS to their existing Gem #2 pumping plant. The plant currently has two 200hp motors attached to two 15 CFS pumps. The pumps take water directly from Snake River to acreage serviced by our Patch canal and our "D" canal. Drought resiliency funds will be used to purchase the materials for the project and SBOC will provide the labor, machines, and all other needs beyond the cost share amount. The project contributes to accomplishing the goals of the FOA in three areas. Under task "A" it will improve our operational flexibility. Under task "C" it will give greater flexibility for the transfer of water within the District and potentially leave an amount of water in the Owyhee reservoir that could be marketed. Under task "D" due to our contract having fish flow augmentation based on a percentage of storage any water that is saved in the reservoir would add to the amount the District would use for fish flow.

This project is located on District facilities and would take approximately one calendar year to finish and an estimated three months of construction work. Giving a completion date on or around 22 January 2016 if it was started in the beginning of August.

### **B. Background Data**

Construction of the Owyhee Project began in 1928 through contracts awarded by United States government through the USBR. The first water delivered in 1935 with the final lateral extension finished in 1939. The project has a North Division (Owyhee Irrigation District) and a South Division (South Board of Control). The two Divisions have a Joint Committee made up of board members from each division that meet at least monthly to discuss water allocation, repayment contract issues, power generation and other areas of mutual concern. The USBR owns the facilities with the Districts operating the facilities and paying for them through a repayment contracts with the United States Department of the Interior, Bureau of Reclamation.

The Owyhee Reservoir holds 715,000 AF of active storage which is enough water for two irrigation seasons. The reservoir water is divided between Owyhee Irrigation District, Old Owyhee Canal Co. and the South Board of Control. The South Board of Control's water supply is primarily for irrigation of crops but has some use with cities for lawn water. The

District services approximately 44,828 acres over three irrigation districts that it operates. This acreage breaks down to approximately 22,326 acres that are “Old Gem” with water supplied out of the Snake River, Jump Creek, Sage Creek and Succor Creek. As well as approximately 15,717 “New Gem” acres and 6,785 Ridgeview acres each of these receive their water supply from the Owyhee Reservoir. Water rights are as follows: Snake River 376.65 CFS, Succor Creek 49.72 CFS, Sage Creek 20 CFS, Jump Creek 15.85 and Owyhee reservoir where the District receives 30% of the allotment for the Owyhee Irrigation District and the South Board of Control.

The South Board operates 155 miles of open canals, 25 miles of pipelines, 85 miles of open drainage ditches, two major pumping plants, two re-lift pump stations, and five SCADA sites with two more to be installed this water season. South Board delivers water to 983 water users. The typical crops that are grown by these users are: alfalfa hay, pasture grasses, corn, wheat, beans, sugar beets and potatoes.

In the past South Board has worked with Reclamation on many WaterSmart grants. Here are a few of those past relationships: 17.7 pipeline gravity pressure project funding agreement No. R14AP00062, 14.02/15.8 pipeline project agreement No. R11AP1S027 and 4-3/5-7 lateral pressurization project agreement No. R11AP1S052. In all the above mentioned relationships Reclamation provided matching funds for water conservation and the District acted as the contractor making their in-kind contribution through labor and equipment.



100' to the "D" canal and/or up 70' to the Patch canal. These two canals provide irrigation water to approximately 2,300 acres of irrigable land within Gem Irrigation District. The water will be carried from the pump to the canals via 2,500' of 27" PVC pipe that the District will install next to the existing supply line from the plant. Also, the District is adding a hoist inside the plant to allow for all pumps to be easily lifted when service or repair is needed.

The work will involve site preparation including setting of survey stakes to establish grade. The second step will be the excavation of trench and installation of pipeline while simultaneously demolishing the existing floor and demolition of current plant water intake. Next, installing the new pump, installation of weed screen and installing the overhead hoist. The initial backfill will be made as the pipe is laid and will be done with the materials that are excavated unless they don't meet the engineered backfill requirements. Next, the connections to the pump/existing penstocks and to the outlet structure at the canal will be made. Lastly, the final backfill and grade will be made with a road grader and set back to the original land level.

The District will use all of its own employees and equipment where their professional expertise meets the needs of the project. The District anticipates the need to hire contractors for the installation of the pump and hoist.

#### **D.1 Evaluation Criterion A – Project Benefits**

Gem #2 project will allow the South Board to deliver the full instantaneous delivery amount of 1 miner's inch per acre to all of the acres under the "D" canal and the Patch canal. Historically the District could draw water out of Sage and Succor creek to supply these acres but that water source currently cannot meet our water right due to the current prolonged drought. The District currently has pumps in Gem #2 for that acreage but they can only deliver approximately 0.5 inches per acre. Due to this limitation we currently supplement these acres with water out of the Owyhee reservoir.

This project will provide benefits for an indefinite amount of time because the pump and lines can always be replaced or repaired if failure occurs.

The expansion of Gem #2 pumping plant would involve an additional 26 CFS supplied out of the Snake River to supplement the dwindling supply from Sage and Succor creeks. Here is the calculation for 26CFS: 2,303 acres times 9 gal/min per miners inch = 20,727 gal/min divided by 448.8 gal/min per CFS = 46 CFS needed minus 20 CFS current pumping capacity = 26 CFS needed. This will represent approx 7% of our Snake River water supply and approx 3% of our total water supply.

This expansion project will allow SBOC to better manage the different sources of the supply by giving us a way to save water out of the reservoir and tap additional supply from the

Snake River. It will also allow us to deliver an amount equivalent to our instantaneous obligation water when the river is low.

While the project will not make new information available to water managers it does impact a significant portion of the Districts water supply. The amount that will be directly affected will be 9,212 AF, the allotment for the 2,303 acres from the two canals. However, half of our water supply will see some effects because the water from the reservoir will no longer be needed to fulfill the instantaneous delivery needs for these acres. This will make that water available to the 22,501 acres that are serviced solely from the reservoir.

What percentage of the total water supply is being better managed? Between direct and indirect the effects will be seen in approximately 50% of our water supply.

Qualitatively we will be free from the ongoing frustration between the land owners for these acreages and from some of their neighbors about the “proper” place of use for the reservoir waters. The District will have better operational flexibility to supply the water from where it is available and determine which sources of supply will have the least amount of loss at the time of demand.

It has the potential for the portion of 9,212 AF that we typically supplement with reservoir water to be marketed. The first priority of this water would be to meet the demands of the other SBOC users under the reservoir. However, if SBOC deems the water to be expendable it could be made available to other water users via the Idaho Water Bank process. There are many potential users such as: other irrigation entities, wildlife, fish and flow augmentation are a few of the potential users.

The only benefit to wildlife the District foresees is the potential for saved water in the reservoir that will yield a larger portion of water for the percentage for fish augmentation to be calculated from.

## **D.2 Evaluation Criterion B – Drought Planning and Preparedness**

The SBOC drought contingency plan is included as: Appendix I. SBOC drought plan is centered on drought monitoring, vulnerability assessment, drought mitigation procedures, courses of action, having a clear operational/administrative framework and regularly updating the plan as needs and conditions change.

Portions of the plan have been developed through collaboration with multiple stakeholders: SBOC, Owyhee Irrigation District, Old Owyhee Ditch Company and USBR Snake River Area Office. The main area of collaboration between from these stake holders is monitoring and response actions when a drought is eminent. This is evidenced by the MOU that was developed in 2014 water season. The MOU is viewed as a living document by all these parties.

The drought plan addresses climate change in that it sites a report prepared by the University of Idaho that reviewed various indicators of climate change. The review of this

report has in part spurred the filing of this application for matching funds because SBOC acknowledges the increase in temperature will have an effect on their supply of and demand for water. SBOC is committed to aggressively meeting the challenge this change in demand and supply poses for its water users and therefore has identified the expansion of their Gem #2 pumping plant as one of their sustainable responses to this challenge.

The expansion of Gem #2 would address bullets 3 and 4 under courses of action in our contingency plan. This project would allow for a more uniform delivery of water to all water users and it would prolong the season for all the acreage serviced by the reservoir.

The proposed project is high priority according to the vulnerability assessment which identified the decrease in stream flow caused by a dryer climate. SBOC has 105 CFS water right out of Sage, Succor and Jump creeks. The flows in each of these creeks have been in steady decline and the decline has forced SBOC to supplement the creeks with water from the Owyhee Reservoir. The acreage serviced by Gem #2 pumping plant relies heavily on Succor Creek flows and can receive supplemental flow from Sage Creek via a siphon that carries water under Succor Creek to the Patch canal.

### **D.3 Evaluation Criterion C – Severity of Actual or Potential Drought Impacts**

The Owyhee Project services 112,095 acres across parts of Oregon and Idaho and is currently experiencing a prolonged period of drought. The Owyhee Project has had many good years of water and has been able to rebound from singular short water years because of the Owyhee Reservoirs' two water-year storage capabilities. For example, in 1992 the project experienced a historically bad year with no carryover from 1991 to draw. This shortage in storage resulted in to a sixty-three percent reduction from the normal allotment for farmers on the Project. The Project was able to bounce back with sufficient water in 1993. However, the current drought affecting the Project has resulted in two seasons of short water with no carryover (2014 & 2015). With a third water season, 2013, that was only a full allotment because we had the carryover from 2011 & 2012.

After the 1992 water year the District reinvested in the Gem #2 pumping plant and put in the existing pumps. However, since 1992 these pumps have only been used fulltime for the current drought situation and part-time during times of high summer demand. This plant is crucial to our operations in drought/high water demand scenarios because it allows us to provide water to the acreage serviced by the Patch and "D" canals because we cannot pull it out of the various creeks we have water right from. Without this plant and the proposed expansion we cannot provide the full water obligation to these lands because there is not enough water in the creeks to allow us to draw our full water right.

The Owyhee Project is proactive in drought monitoring by District managers attending IDWR (Idaho Department of Water Resource) water supply committee meetings, monthly

drought meetings OWRC and working closely with other concerned parties in the region. The Joint Committee meets often to manage the affairs of the Project but never more so than when facing difficult decisions regarding curtailment and allocating short water supplies to our farmers. To that end, in 2014 the Joint Committee brought all parties (South Board of Control, Owyhee Irrigation District, Old Owyhee Ditch Company and the Bureau of Reclamation) to the table and established an MOU to ensure that the water is allocated fairly and in accord with the various contracts that need to be honored.

Several other factors are considered in regard to the Owyhee Project and the importance its continued viability. First, the construction of the Owyhee project has made an irrigation induced aquifer that is now relied upon by thousands of people for their drinking water. The mostly artificial aquifer that provides for the needs of the surrounding communities is recharged through crop irrigation, canal seepage and rainfall. Without the sustained existence of this Bureau of Reclamation project the aquifer will not be able to produce enough ground water to supply the residents' current needs. In fact, the current drought cycle has lead to many resident wells drying up or needing to drill deeper wells.

Next, there are fish that need the water from the Projects watershed to sustain their populations to in turn provide food and recreation for people of the area. The reservoir that the Project's dam created provides for recreation to many thousands of people each year.

Also, the Owyhee Project attracts many thousands of recreationalists each year. They come to fish the plentiful fishery or boat on the massive reservoir. The recreational value of the project is hurting from the current drought as well due to the lower reservoir levels which make accessing the boat ramps more challenging. Also, lower flows through the dam to the river make for a less inviting fishery because it impacts the number of fish as well as the available pools to fish due to the decreased depths from low flows.

The last factor is the reduced river flows and warmer weather cycle largely due to the changing climate. The area is experiencing warmer dryer winters resulting in reduced snow pack. As well as warmer dryer irrigation season which has lead to increased demand on a smaller supply of water.

Climate change in the local area is affecting the current drought conditions. In a report prepared by the University of Idaho various indicators of climate change were studied. In summation of that information we can start to build correlations between these climate indicators and the drought we are now facing. First, the annual temperature has increased by 1°F from 1895 to 2009. This current spike in the mean temperature is similar to that which was experienced in the 1920's and 1930's; which was an era of prolonged drought. The streams have also changed in their peak flows, timing of flows, and stream temperatures. The advancement of peak flows has resulted in peak flows that are approximately one week earlier in the spring than they were in 1949. Since the peak flows

are coming earlier it changes the timing of the irrigation season and often means that the flows are not as easily utilized for irrigation. These flows are not only later but the magnitude of the runoff for these peaks are frequently much weaker than that of past peak flows. Since the magnitude of the flows has decreased less water is available for capture in the various reservoirs, including the Owyhee Dam. The reduction in stream flows is affected by the reduced snowpack and lower snow water equivalent since 1980. The stream temperatures have increased by 0.25° per decade for the last four decades. This stream temperature increase appears to be even more dramatic (2.7 times more rapid increase) than the air temperature increase and has serious ramifications for water quality. Changes to water quality, including temperature, effect crop growth as well as affect the ecosystem and habitat that water provides. The last correlation that can be drawn from this report is the increased frequency of wildfires and the amount of acreage they burn. In recent years we are experiencing substantial increases in acreage burned by wildfires. The trend is similar to the drought years of the twenties and thirties but the areas burnt are even greater than were burnt then. This University of Idaho report can be found at the following web address:

<http://webpages.uidaho.edu/jabatzoglu/PDF/IndicatorsofClimateChangeIdaho.pdf>

A few more Owyhee watershed specific facts are:

- 1) 8 out of 12 historic monthly precipitation lows have come after 1940
- 2) 12 out of 12 historic monthly high precipitation have come after 1940
- 3) 11 out 12 historic monthly temperature highs came after 1940
- 4) 12 out of 12 historic monthly temperature lows came after 1940

These facts show that the Owyhee watershed is becoming ever more unpredictable in climate which has led the current drought and will lead to more.

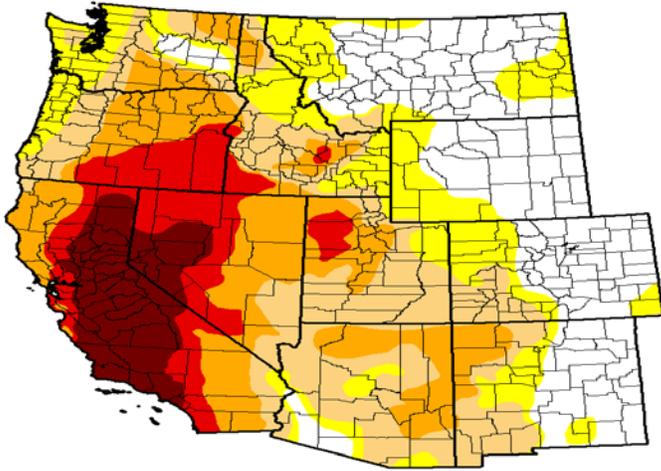
Owyhee Reservoir normally provides 4 acre-feet per acre during the irrigation season. Delivery during drought years is very stressful on District staff due careful delivery of reduced allotments (as low as 1.5 AF per acre in 1992 and 2015). Even recognizing the anticipated shortage of water (1992, 2014 and 2015), all users want their normal share of water delivered because of the economic effects of not having a full season supply of irrigation water for all of their irrigated acreage.

Typically crop yields on field crops (hay & pasture) are in relation to the amount of water delivered, and low or no crop yield means no income for drought years. Some high water use and high value crops are not even be grown, i.e. potatoes. The following, Economic Effects, report was generated by the USBR and shows the economic impact of the drought for the agricultural industry serviced by the Owyhee Project.

However, through careful planning, collaboration with local entities and targeted projects the District can continue to provide water to its patrons. The following water graph, drought map and key from <http://droughtmonitor.unl.edu/> gives an overview of our current situation.

**Intensity:**

- **D0** (Abnormally Dry); **D1** (Moderate Drought); **D2** (Severe Drought); **D3** (Extreme Drought); **D4** (Exceptional Drought)



*Drought Condition (Percent Area):*

Week	Date	None	D0-D4	D1-D4	D2-D4	D3 D4	D4
<b>Current</b>	<a href="#">2015-05-26</a>	25.37	74.63	57.03	35.92	17.59	7.94
<b>Last Week</b>	<a href="#">2015-05-19</a>	23.49	76.51	60.69	36.57	17.59	7.95
<b>3 Months Ago</b>	<a href="#">2015-02-24</a>	30.07	69.93	59.91	31.06	17.38	7.04
<b>Start of Calendar Year</b>	<a href="#">2014-12-30</a>	34.76	65.24	54.48	33.50	18.68	5.40
<b>Start of Water</b>	<a href="#">2014-09-</a>	31.48	68.52	55.57	35.65	19.95	8.90

<b>Year</b>	<u>30</u>						
<b>One Year Ago</b>	<u>2014-05-27</u>	31.18	68.82	60.38	47.20	20.21	4.31

## **Economic Effects**

### **OWYHEE PROJECT**

#### **IRRIGATION DISTRICT**

#### **ACRES AFFECTED**

South Board of Control	28,000 +/-
Old Owyhee DID	14,000 +/-
<u>Owyhee Irrigation District</u>	<u>52,433.8 use 52,434</u>
Total Acres Affected	94,434 acres

\*\*Estimated 67% loss in available irrigation water to the user for 2014 and 2015.\*\*

\*\* Estimated that 25% of lands will remain fallow in 2015.\*\*

Based on discussions with both County Extension Agents for Owyhee County, Idaho and Malheur County, Oregon the majority of the crops grown in their counties are feed crops.

Although high value crops such as; mint, onions, sugar beets, beans, and seed crops are grown in the drought effected locations, they are seeing that the growers are moving the locations in which they are planting these high value crops and are following the water, so to speak.

Information provided by Scott Jensen University of Idaho Owyhee County Extension Agent, located in Marsing, Idaho.

- Using a 40/40/20 split on the crop of Alfalfa/Hay, Corn, Small Grains
- Estimated that these crops would see a 40% reduction in yields based on the estimated irrigation water available for 2015.
- Crop average yields and gross values
  - 2014 Value/ Hay - \$200 ton with avg. yields of 6 tons/acre. Using a gross of \$1050/acre for an avg. (to allow for rain damage or quality differences)
  - 2014 Value/Corn - Silage Corn -\$38/ton with avg. yields of 27 tons/acre. Grain Corn - \$5.88/bushel with an avg. yield of 185 bushels/acre. Using a gross of \$1050/acre for an avg.
  - 2014 Value/Small Grains (wheat or triticale hay) - \$160/ton with avg. yields of 4 tons/acre. Using a gross of \$640/acre for an avg.

### **Estimated Losses**

Acres Affected = 94,434 ac

25% of Acres that will remain fallow = 23,609 ac

#### Fallow Acres Losses (Based on 40/40/20 split)

Small Grains – 20% (4722 ac)

4722 acres (\$640/ac) = \$3,022,080

Hay – 40% (9444 ac)

9444 acres (\$1050/ac) = \$9,915,780

Corn – 40% (9443 ac)

9443 acres (\$1050/ac) = \$9,915,150

Total Losses on Fallow Acres = \$22,853,010

#### Irrigated Acres Losses (Based on 40/40/20 split)

75% of the acres expected to receive 1.3 AF/ac instead of 4 AF/ac resulting in and estimated production losses of 40%.

Small Grains – 20% (14,165 ac)

$$14,165 \text{ acres } (\$640/\text{ac}) = \$9,065,600$$

Hay – 40% (28,330 ac)

$$28,330 \text{ acres } (\$1050/\text{ac}) = \$29,745,500$$

Corn – 40% (28,330 ac)

---

$$28,330 \text{ acres } (\$1050/\text{ac}) = \$29,745,500$$

$$\$68,556,600(40\% \text{ yield losses}) = \$27,422,640$$

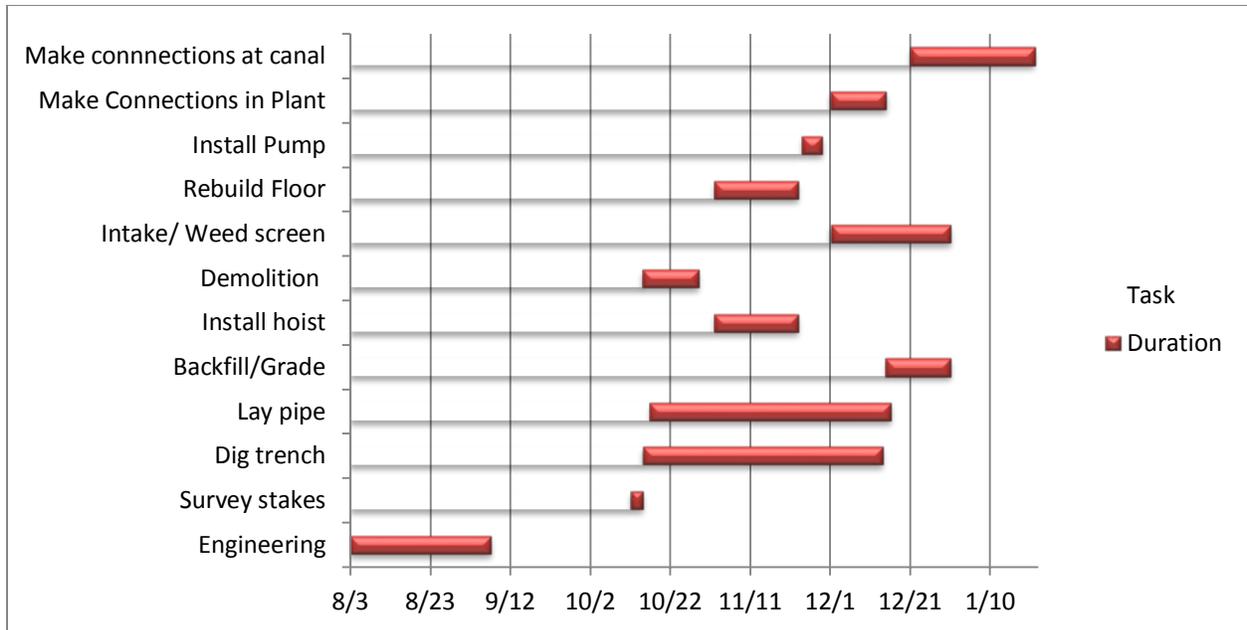
#### **D.4 Evaluation Criterion D – Nexus to Reclamation**

The South Board of Control is connected to the United States Bureau of Reclamation through a repayment contract. The Owyhee Reservoir was created when the Owyhee Dam was constructed by Reclamation and water is obtained by the South Board through this infrastructure from Reclamation. The addition of a pump at Gem #2 will make more water available to this basin by adding source flexibility to the South Board.

The Duck Valley settlement will have direct effect on the supply for the Owyhee Project lands. The additional water supply for the South Board will help to mitigate the effects of the settlement on the lands within the Owyhee project. The reduced impact on the Owyhee Project will help reduce any potential challenges to the Duck Valley settlement by downstream water users.

#### **Evaluation Criterion E – Project Implementation**

The implementation timeline with milestones and task is listed below (note the time between engineering and staking is to allow for irrigation season to end):



The District will need a water right permit and filing application is attached as Appendix ii. Also, a permit from the Homedale Highway District allowing us to cross River Rd. this permit is attached as Appendix iii. The district will work within existing easements to install the pipeline that will carry the water to the canals.

The preliminary engineering for the project which has allowed us to submit this application was performed by USBR Snake River office and the NRCS Marsing, ID office. Any additional engineering required it will be performed by an engineering firm subject to award from competitive bidding.

The demolition operation and the hoist installation will be subcontracted to companies with expertise in those fields based upon winning competitive bidding process.

The District foresees continuing their current procedure of use for the Gem #2 plant when the new pump and water right out of the Snake River are completed. This procedure entails using the pumps when we are at peak demand of water season and full water season use when the supply of water in the Reservoir is insufficient for supplementation of these acres.

### **E. Performance Measures**

The District will monitor and record the water usage of Gem #2 to determine when it eclipses the plants current capacity. This will allow the district a means of tracking the amount of water the pump delivers. The District will collect this data as proof of the amount of water that has be preserved in the Reservoir for use on other District acreage or water marketing. The District will also calculate the cost per AF to operate the new pump. With this the District will know the exact dollar per AF the project replaced from the Reservoir and be able to price this water for marketing if it is deemed marketable.

There will be several jobs that will be handled by subcontractors namely: electrical, hoist installation, engineering, demolition and construction of the weed screen.

### ***III. Environmental Compliance***

*Will the project impact the surrounding environment?* No.

The project will consist of trenching within existing easements and will therefore have no impact on the surrounding habitats or environment. The nature of the work (trenching and backfill) will have a nominal effect on air quality. All work in the Snake River will be done in accordance with all guidelines of the Department of Ecology and will therefore mitigate effects to the water.

*Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area?*

The District is not aware of any such species in the project area.

*Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States?"*

The District is not aware of any such wetlands.

*When was the water delivery system constructed?*

The pumping plant was constructed in 1912 and then modernized in 1993.

*Will the project result in any modification of or effects, to individual features of an irrigation system?*

Yes, the project will modify the interior of the plant, redesign the intake structure and add a new weed screening system. All of the modification will be done in areas that were updated during modernization in 1993.

*Are there buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places?*

The District does not have any currently listed however due to the age of certain features we may have some that would be eligible.

*Are there any known archeological sites in the proposed project area?*

The District is not aware of any such sites.

*Will the project have disproportionately high and adverse effects on the low income or minority populations?*

No.

*Will the project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?*

No.

*Will the project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known in the area?*

No.

## ***V. Required Permits***

The District will need to acquire a crossing permit from the Homedale Highway District, a permit from the US Army Corps of Engineers and a water right from the Idaho Department of Water Resources.

The District will pursue these permits from each agency through the typical channels for each. To demonstrate the District's commitment to obtain these permits enclosed as appendices are: the filing for the water right, a letter of support from the highway district and initial review letter from the Corps of Engineers.

## ***VI. Appendices***

### **Appendix I**

#### **Drought Contingency Plan**

The Joint Committee is made up of directors from the Owyhee Irrigation District and South Board's respective boards of directors. The Committee is responsible for many facets of drought monitoring and planning. The Committee took the lead in forming a task force to address the following six facets of a drought contingency plan. The task force is comprised of staff from Owyhee Irrigation District, South Board of Control, Old Owyhee Ditch Company and Reclamation.

#### **1-Drought Monitoring:**

Water supply projections — NRCS and US Weather Service provide public forecast information for potential runoff from January through early spring months in all river

basins in Oregon and Idaho. This information is readily available on computer Internet web sites for USBR, USGS, NACS and US Weather Service.

The district cooperates closely with NRCS in maintaining current awareness of snow pack in the upper watershed of the Owyhee River; Lake Owyhee storage information is available on a continuing basis through on-site visits, through the BOR Hydromet System and NRCS Snotel System data. Runoff projections are known immediately upon release, via in-office computer. When the data is inadequate, on-site visit can be made by District staff to personally read gauges to verify or correct data. Snotel sites in the Owyhee River Watershed include: Battle Creek, Big Bend, Bull Basin, Columbia Basin, Fry Canyon, Gold Creek, Lower Jack Creek Upper Sack Creek, Sacks Peak, Laurel Draw, Lookout Butte, Louse Canyon, Quinn Ridge, Red Canyon, Rodeo Flat, Silver City, Succor Creek, Taylor Canyon, Toe Sam Am, Trout Creek, and Vaught Ranch.

The following indices, trends, reports, etc., are used to support current and pending drought conditions:

BOR Hydromet System data, NRCS Snotel System data, U.S. Drought Monitor and runoff projection using SWSI (Surface Water Supply Index)

The District will perform a self evaluation of snow survey data and forecasted runoff.

When:

- 1) The lack of low elevation winter precipitation becomes critical at 50 % of normal by 1<sup>st</sup> March,
- 2) And the March 1 reservoir storage is at, or less than 75 % of normal,
- 3) And when the projected runoff for April — June is predicted to be not greater than 75 % of normal, the District will provide a detailed self evaluation of the potential irrigation season water supply for potential reduced delivery, taking into consideration all of the available and pertinent “triggering” factors.

Owyhee Project staff, IDWR, and OWRD keep in very close contact by scheduling monthly meetings, so that all are kept apprised of pending water shortages. At any time after January 1 when it appears a water shortage may potentially occur, this group jointly coordinates action with other local community and county officials.

Variations in weather patterns may correct a drought situation before it becomes critical, i.e. heavier than normal spring and early summer rains and lower than normal temperatures may alleviate the effect of a dry winter. Weather forecasting is not an exact science.

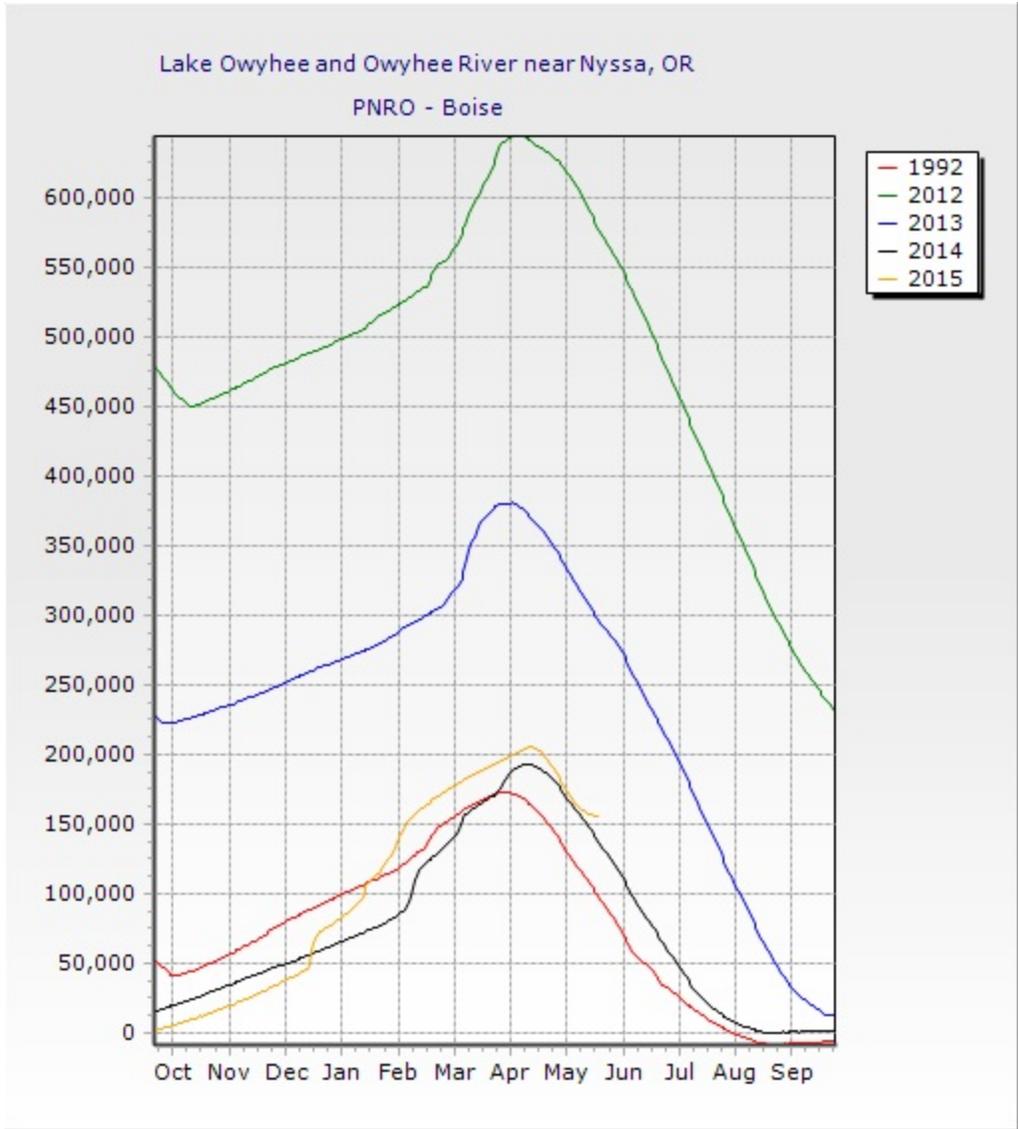
Water users will be informed by District staff of potential water supply reduction through local media, district mailings, annual growers meetings, etc. as early as possible so they can plan crops to be planted and establish priorities for fields to be irrigated.

At any time in the spring or early summer, should a potential drought condition change to what shows to be more near a normal water supply year, the same communication procedures that were followed to initiate action will be followed to un-initiate action.

### 2-Vulnerability Assessment:

This is an on-going program, especially when there is a subject that is essential for review. When the allotment, curtailment and turn-on/shut-off dates are being discussed the Committee meets weekly at a minimum to address these crucial issues.

The frequency, duration, severity, shortage of supplies, and potential for catastrophic loss of water associated with Owyhee project has historically been nominal. With the construction and operation of Owyhee Dam, which acts as an irrigation storage reservoir, and with the installation of many miles of lined canals and pipelines in the districts, Owyhee Project can provide adequate water delivery except in excessive deficit situations as occurred in 1992 and 2013-current. Typically the project can maintain two year's water supply from winter and spring runoff from the Owyhee River as stored water in Lake Owyhee. The attached water graph portrays the dire situation our project is currently facing.



Owyhee project relies principally on stored water in Owyhee Reservoir for their irrigation water supply for Ridgeview, New Gem and Owyhee Irrigation ID's; however we do have water rights from the Snake River for pumping plants throughout project. When conditions occur where storage or stream flow is lost (or partially lost), curtailment and allotment procedures have and will be followed.

### 3- Drought Mitigation Procedures:

Severe allotment reduction and curtailment procedures for water delivery occurred in 1992, 2014 and 2015 on the Owyhee Reservoir supplied acreage, and to a lesser extent in other water short years. Users were informed of the shortage before the irrigation delivery season commenced. As determined by the Joint Committee early in March, delivery usually is to be reduced mid season. As also determined by the Committee, water delivery is provided uniformly to all users. Water delivery, on the Owyhee Reservoir supplied acreage, for short years, typically shuts off in mid August. Acreage under the Snake River receives adequate water for the full season. Operational and management spills were reduced, which required more intensive water control by ditch riders than: for normal years. Seepage losses cannot not be eliminated and are higher percentage wise than for normal and above normal years. For instance, startup losses were approximately 10% higher than in 2014 due to an off season that was one and a half months longer than typical.

Early in the year all users are asked to use extreme caution in use of their water and reduce or eliminate runoff. Extra time (i.e. longer work days) was spent by the ditch riders for increased water control at an increase in operation cost to the Project. Short water years are very stressful year for all of the staff. This type of operation would be expected during each low water supply (drought) year. The season's operation would have to be planned for early, i.e. March & April.

### 4-Courses of Action:

When the Trigger levels are reached, the following actions will occur:

- Users will be informed of any potential water shortage as early in the season as possible (i.e. early enough for crop planting decisions), and before any irrigation delivery season commences.
- As determined by the Committee, i.e. early in March and April, delivery may need to be reduced mid- irrigation season and shut off mid to late season, as necessary.
- As determined by the Committee, water delivery will be provided uniformly to all users, as long as water is available.
- As will be typically expected, water delivery on the South and North Canals (from Owyhee Reservoir) supplied acreage will be reduced, as necessary. Water will be shut off when flow in canals and delivery to users cannot be maintained.

It is expected, acreage under the Snake River Pumps, will most likely receive adequate water for the full season.

When the Trigger level is reached, the following local community action occurs:

- All local irrigation districts in the basin and local federal and state agencies cooperatively assess the watershed conditions based on accumulated low elevation winter precipitation, existing reservoir storage and projected runoff Board of Directors and users are typically involved.
- When a potential drought condition is viewed as a real issue by local groups, open discussion is held with county officials. Public input is invited. County officials then request from the Governor to be declared an official Drought Area.
- The Oregon Drought Council (representatives from state agencies, federal agencies, and the Governor's office) meet to assess the request and local conditions. This group is chaired by the Office of Emergency Management, (503)378-2911, ex. 22292, currently headed by Andrew Phelps (2015). The State Office of Emergency Management provides a recommendation to the Governor
- The Governor officially declares the specific county or region as a Drought Area Owyhee Project is then allowed to use any of the following applicable tools under OAR. 690-15-300 and ORS 540.523, for temporary water right transfer, water supplementation, qualify for federal relief funds, etc. See OAR 690-19-020 (12) for definition of temporary transfer (means temporary change in use, change in place of use or change in point of diversion).

#### Other courses of action

Alternative sources of water and/or transfer in diversion points are not available choices for the district, since all of the irrigation districts in the Malheur, Owyhee, and Snake River basins would most likely be short of water during the same period,

Diversion of water from other adjoining basins is not an alternative, since carry-over storage, winter precipitation and runoff from adjacent basins are very closely related and would likely be water short. Lake Owyhee has a two year irrigation supply for average water supply years, whereby most reservoirs in adjoining watersheds only have a one year irrigation supply.

#### Curtailement and Allocation Procedures

Upon recommendation of the districts; the Committee provides the decision and direction for curtailement and allocation of water each year based on the projected reduced water supply. Degree of curtailement and allocation will be based on projected water supply reduction as to how it fits in with the districts' water rights, (see page 4), and to other prior 'water rights within the basin.

#### Curtailement Considerations by the Committee:

- Delay turn-on (delivery to users) date to conserve water for peak consumptive use period based on a shortened estimated seasonal water delivery requirement. This is dependent on spring precipitation.
- Provide intensive management and control of all water within the district, expecting overtime by the ditch riders.
- Decrease operation and management spills to near zero, expecting overtime by the ditch riders.
- Provide intensive information program to users on reducing on-farm water use, including critical plant water use periods.
- Aggressively cooperate with local state and federal agencies providing assistance to irrigators on improving on-farm water use.
- Evaluate the potential for providing financial incentives to users for reduced delivery, based on availability of outside non-district resource funding.
- Evaluate potential for providing cost sharing for utilizing on-farm temporary water conservation measures for surface irrigation users, based on availability of outside resource funding, i.e. use of portable/flexible pipe for delivery of water in head ditches.
- Intensify weed control along canals and laterals to reduce riparian area water use, thus increasing maintenance expense.
- Where applicable, evaluate potential for installing temporary or permanent critical water conservation measures in high water loss areas, i.e. canal seepage areas, leaky water control structures.
- Replace open canals and laterals with pipelines, canal linings, etc., as can be reasonable completed before the delivery season commences
- Provide a comprehensive weekly analysis of water availability during irrigation delivery, with water use goals set week-by-week. Charts with goals would be posted for ditch riders to work toward.
- Water would be totally shut off when it is deemed impractical to maintain canal and lateral flow for deliveries to any and all users.
- Work closely with the other irrigation districts and M & I users within the Owyhee and Snake River basins for potential water sharing or transfer.

Allocation

Water delivery to all users will be reduced unilaterally in accordance with established water rights and projected percentage reduction in water supply, or individual users would be provided alternatives for reduced water delivery such as:

- Reducing irrigated acres.
- Sharing of water to users having critical or high value crops, i.e. orchards, seed crops, etc.
- Not irrigating during selected months, i.e. during peak use period, or quit irrigating for the remainder of the season after a selected month/day.
- During extreme drought condition, under direction of the Board of Directors, water will be shut off when it is deemed impractical to maintain canal and lateral flow for deliveries to users for the remainder of the year.

#### 5-Operational and Administrative Framework:

The South Board will

- Work closely with the task force to implement the contingency plan through their input, resources and know-how through a work plan.
- The District will head open public “town hall” style meetings to reach interested members of the community for their input in the process and to offer ongoing information in regard to the contingency planning process.
- The District will also head these same “town hall” style meetings to continue to educate the public about drought status, mitigation procedures, water conservation and water resource sustainability.
- Provide users with pre-drought water supply projections, planning and decision making processes, so they can be informed as to the potential effects on water availability, crop plantings and seasonal irrigation needs.
- Keep users updated on water supply -projections (drought condition)-and water delivery processes by way of newsletters, local media, telephone service, ditch riders, etc.
- Provide detailed weekly analysis of water availability, crop water needs (i.e. “Agrimet” data) to water users and to staff.
- Work closely with federal, state and local agencies, i.e. NRCS, OSU, by providing accurate and timely information to users for on-farm irrigation management decisions including techniques to minimize water use and optimize production or quality.

District staff will provide an evaluation at the end of the reduced irrigation water supply season to determine effectiveness of decisions and procedures, and effects on: water users, reservoir drawdown, stream flows in Owyhee River, and ODFW on the effects on fish and wildlife in district owned and operated facilities, etc.

#### 6-Plan Update:

The contingency plan will be subject to an update and review process on an ongoing basis. The minimums in this update plan will be yearly review by the South Board and the task force. Monitoring of the contingency plans' processes will occur after every drought year to gauge the utilization of the plan features and their efficacy. If at any time it becomes apparent that plan features, process, information or participant information needs changes it will be updated in the plan immediately. However, at a minimum the plan will undergo a thorough update every five years to keep the information current with our changing water needs in the project area.

STATE OF IDAHO  
DEPARTMENT OF WATER RESOURCES  
**APPLICATION FOR PERMIT**  
To appropriate the public waters of the State of Idaho

1. Name of applicant(s) Gem Irrigation District Phone (208)337-3760  
 Name connector (check one):  and  or  and/or  
 Mailing address PO Box 67 City Homedale  
 State ID Zip 83628 Email office@southboardofcontrol.com

2. Source of water supply Snake River which is a tributary of Columbia River

3. Location of point(s) of diversion:

TWP	RGE	SEC	Govt Lot	¼	¼	¼	County	Source	Local name or tag #
4N	5W	32	NW	SE			Owyhee	Surface Water	

4. Water will be used for the following purposes:

Amount 26 CFS for Irrigation purposes from 03/01 to 11/15 (both dates inclusive)  
(cfs or acre-feet per year)  
 Amount \_\_\_\_\_ for \_\_\_\_\_ purposes from \_\_\_\_\_ to \_\_\_\_\_ (both dates inclusive)  
(cfs or acre-feet per year)  
 Amount \_\_\_\_\_ for \_\_\_\_\_ purposes from \_\_\_\_\_ to \_\_\_\_\_ (both dates inclusive)  
(cfs or acre-feet per year)  
 Amount \_\_\_\_\_ for \_\_\_\_\_ purposes from \_\_\_\_\_ to \_\_\_\_\_ (both dates inclusive)  
(cfs or acre-feet per year)

5. Total quantity to be appropriated is (a) 26 cubic feet per second (cfs) and/or (b) \_\_\_\_\_ acre feet per year (af).

6. Proposed diverting works:

a. Describe type and size of devices used to divert water from the source. (1) 26 CFS Floway pump powered by (1) US 400hp motor

b. Height of storage dam n/a feet; active reservoir capacity n/a acre-feet; total reservoir capacity n/a acre-feet. If the reservoir will be filled more than once each year, describe the refill plan in item 11. For dams 10 feet or more in height OR reservoirs with a total storage capacity of 50 acre-feet or more, submit a separate Application for Construction or Enlargement of a New or Existing Dam. Application required?  Yes  No

c. Proposed well diameter is n/a inches; proposed depth of well is n/a feet.

d. Is ground water with a temperature of greater than 85°F being sought?  Yes  No

e. If well is already drilled, when? n/a; drilling firm n/a; well was drilled for (well owner) n/a; Drilling Permit No. n/a.

7. Description of proposed uses (if irrigation only, go to item 8):

a. Hydropower; show total feet of head and proposed capacity in kW. \_\_\_\_\_

b. Stockwatering; list number and kind of livestock. \_\_\_\_\_

c. Municipal; complete and attach the Municipal Water Right Application Checklist.

d. Domestic; show number of households \_\_\_\_\_

e. Other; describe fully. \_\_\_\_\_

8. Description of place of use:

- a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- b. If water is used for other purposes, place a symbol of the use (example: D for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RGE	SEC	NE				NW				SW				SE				TOTALS	
			NE	NW	SW	SE														

Total number of acres to be irrigated: 22,603

9. Describe any other water rights used for the same purposes as described above. Include water delivered by a municipality, canal company, or irrigation district. If this application is for domestic purposes, do you intend to use this water, water from another source, or both, to irrigate your lawn, garden, and/or landscaping?

2-64, 2-65, 2-10416, 57-2118, 57-2177, 57-4104, 57-10854, 57-10901, 57-10912, and 57-10913

10. a. Who owns the property at the point of diversion? Gem Irrigation District

b. Who owns the land to be irrigated or place of use? Landowners within Gem Irrigation District

c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing:  
Title 43, Idaho Code

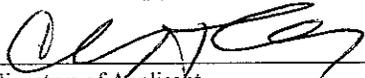
11. Describe your proposal in narrative form, and provide additional explanation for any of the items above. Attach additional pages if necessary.

This right is intended to be used in conjunction with right 2-64, 2-65 and 2-10416 and a combined use remark would be appropriate.

12. Time required for completion of works and application of water to proposed beneficial use is 5 years (minimum 1 year).

13. **MAP OF PROPOSED PROJECT REQUIRED** - Attach an 8½" x 11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.

The information contained in this application is true to the best of my knowledge. I understand that any willful misrepresentations made in this application may result in rejection of the application or cancellation of an approval.

  
Signature of Applicant

\_\_\_\_\_  
Signature of Applicant

Clancy Flynn Manager  
Print Name (and title, if applicable)

\_\_\_\_\_  
Print Name (and title, if applicable)

**For Department Use:**

Received by \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_ Preliminary check by \_\_\_\_\_  
Fee \$ \_\_\_\_\_ Received by \_\_\_\_\_ Receipt No. \_\_\_\_\_ Date \_\_\_\_\_

Resolution 2015-1

Gem Plant #2 Capacity Improvement Project

WHEREAS, the South Board of Control has recognized the current drought has reduced stream flows in Sage Creek and Succor Creek; and

WHEREAS, said reduction in flows has created a shortage in water through the diversions for the Patch Canal and the McDowell Canal; and

WHEREAS, the District owns and operates the Gem #2 plant to pump water from the Snake River to service the Patch Canal; and

WHEREAS, the Patch Canal is the closest point of use for Snake River water; and

WHEREAS, there is potential to add pumping capacity to the Gem#2 plant to help alleviate the shortage of water; and

WHEREAS, the Bureau of Reclamation has introduced available grants to help with drought resiliency projects;

NOW THEREFORE IT IS RESOLVED THAT:

The South Board of Control authorizes a project to improve the pumping capacity of the Gem #2 plant.

BE IT FURTHER RESOLVED THAT:

The South Board of Control authorizes the pursuit of Reclamation Drought Resiliency Project monies to help cover the cost of said project.

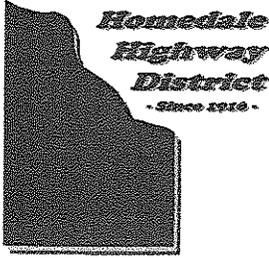
BE IT RESOLVED this 23rd day of June 2015.

South Board of Control

Rick Smith

Chairman

By: 



**Mailing Address:** P.O. Box 713, Homedale ID 83628-3458  
**Physical Address:** 102 E Colorado Avenue, Homedale ID  
**Phone:** 337-3500

To whom it my Concern:

This letter is to voice the Homedale Highway Districts support for the South Board of Controls, Gem # 2 Expansion project. As a local highway district that has jurisdiction for the roads within this water district, this district works very closely with the South Board. The relationship has worked well. As this District is a tax based entity that is supported by taxes, the largest tax base in this district are farmers. If the farmers are short of water, they are reluctant to spend money on trucks and cars, and fuel for those vehicles. When they are reluctant to spend money, less taxes are received, (a large percentage of our revenue comes from registrations and fuel tax) which in turn leaves less to maintain the infrastructure for those farmers to ship their products to market. Water users are the bread and butter of this community. This project, Gem # 2 Expansion, will help in the delivery of water. This area has been in a drought for several years.

Due to the trickledown effect this project will benefit not only the water users in this area, but also the general public.

Again this District is in full support of the Gem # 2 Expansion Project.

Respectfully,  
Stewart Constantine

Director of Highways  
Homedale Highway District