Attachment 1
2/6/15

Roger Chase, Chairman
Idaho Water Resource Board

IDAHO
Water Resource Board

2014 Legislative Actions - Funding for Water Management Projects

- $15M in one-time funds
  - ✓Recharge
  - ✓Storage
  - ✓Mountain Home
  - ✓Northern Idaho
  - ✓Water Supply Bank

- $5M in ongoing funds from Cigarette Tax for "statewide Aquifer Stabilization"
  - ✓Will receive 1st disbursement in July of 2015
  - ✓Eastern Snake Plain Aquifer is 1st priority but other aquifers also have needs

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Water Resource Board

Status of $15 Million Water Sustainability Initiative Appropriation

3-Feb15

Project	Allocation	Amount Committed to Date	Amount Spent to Date	Comment on Progress
Mountain Home	$4,000,000	$4,000,000	$2,505,000	Water rights acquired. In discussions with Air Force about how best to finance and construct delivery system.
Northern Idaho	$500,000	$201,000	$55,310	Rathdrum Prairie Future Water Demands Study completed in cooperation with Rathdrum Prairie communities and University of Idaho. Expect similar proposal from Palouse aquifer area.
Galloway	$2,000,000	$237,500	$87,500	Geotechnical investigation complete. Operations studies nearing completion. Received preliminary permit from FERC. Need to proceed on relocation options fro Weiser Trail and economics of flow augmentation.
Arrowrock Enlargement	$1,500,000	$1,500,000	$0	Study received funding from Congress. Draft feasibility study set to complete by Fall of 2015, with final Record of decision in 2017.
Island Park Enlargement	$2,500,000	$100,000	$0	Developing agreements with Bureau of Reclamation. Need to proceed with detailed lands impacts analysis.
Water Supply Bank Computer Infrastructure	$500,000	$500,000	$0	Defined needed tasks and deliverables. Will issue RFQ in March.
ESPA Recharge Infrastructure	$4,000,000	$537,000	$3,819	Construction underway to facilitate additional winter recharge on Milner-Gooding Canal. Engineering in Twin Falls Canal, Northside Canal, and Southwest Irrigation District Pipeline. Programmatic review underway.
TOTALS	**$ 15,000,000**	**$7,075,500**	**$2,651,629**	

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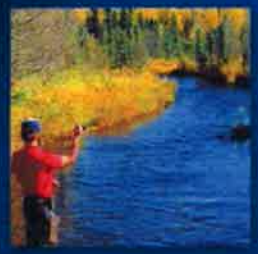
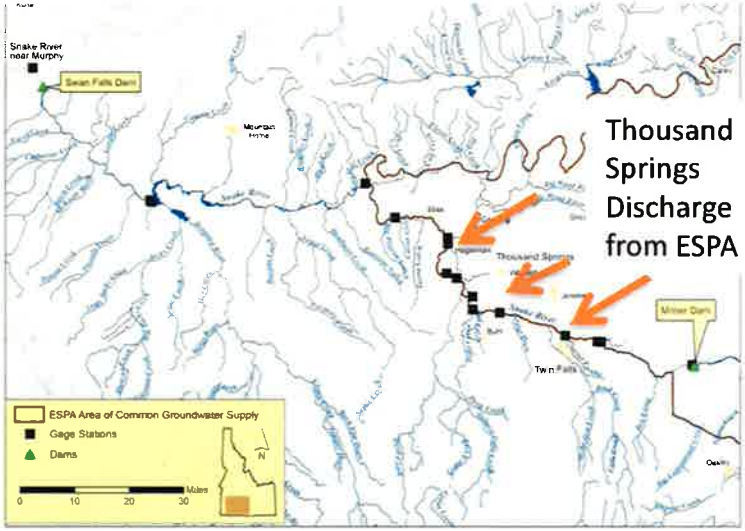


Stabilization of Eastern Snake Plain Aquifer is Essential

- ✓Prevent further GW vs. SW user conflicts on Eastern Snake Plain
- ✓Meet State's Swan Falls Agreement obligations to maintain minimum flows at Murphy Gage

When flow is zero at Milner, flow at Swan Falls Dam is made up almost entirely of spring flows from the ESPA



Thousand Springs Discharge from ESPA

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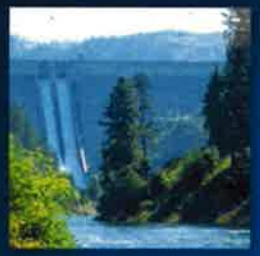

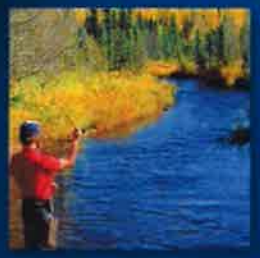

ESPA Managed Recharge

✓Undertaking "winter recharge" to increase amounts

✓Need to increase recharge to 250,000 acre-feet/year to stabilize & re-build aquifer

✓Recharged about 35,000 acre-feet since October 27 at cost of about $135,000

✓Also spilled about 130,000 acre-feet past Milner since Oct. 27 due to lack of capacity

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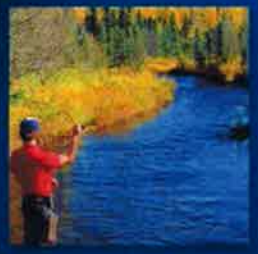

ESPA Managed Recharge

✓Working with canal companies to increase winter recharge capacity - maximize recharge of water available at Milner

✓Also working with canal companies located above American Falls Reservoir to prepare for recharge deliveries if water available

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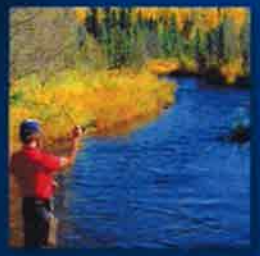

Hagerman Valley

✓Working toward overall settlement

- •State undertakes stabilization of aquifer and spring flows - recharge
- •Junior ground water users pay for below-the-rim mitigation projects

✓$1.26M loan for Rangen mitigation pipeline by IGWA

✓Lease of Aqualife Hatchery to IGWA

✓ Anticipate loans for additional projects

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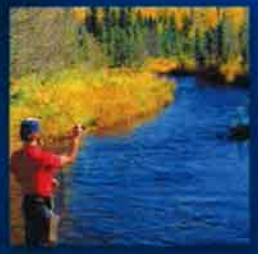

Hagerman Valley - Rangen Pipeline

Construction Progress – February 3, 2015

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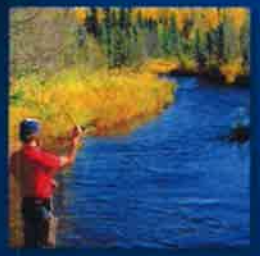

Mountain Home

✓Develop replacement water supply for Mt. Home AFB – eliminate use of declining ground water

✓Completed purchase of senior Snake River water rights from Simplot

✓In discussions with Air Force - how best to finance and build delivery project

✓Air Force very supportive

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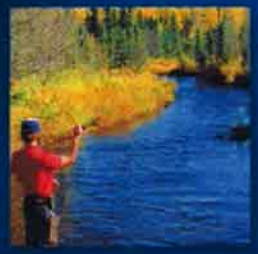
Water Resource Board

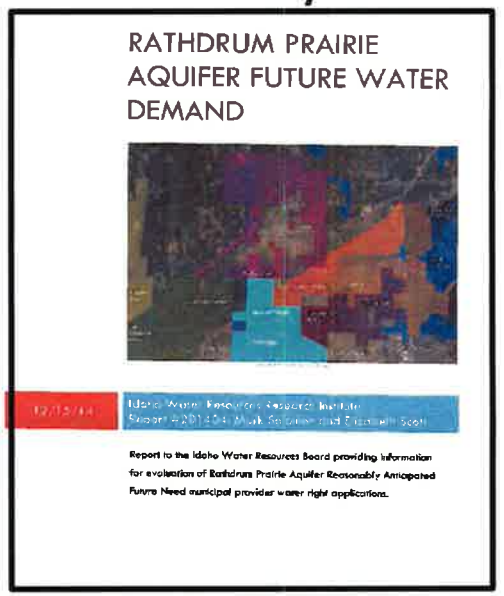


Rathdrum Prairie Aquifer

✓Partnered with Rathdrum Prairie communities and University of Idaho to determine future water needs from the aquifer

✓Helps position against downstream water demands, including instream flow right being established by Washington

✓Also had study of pumping effect: done – most impact to river flows from Washington pumping



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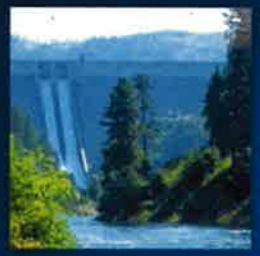

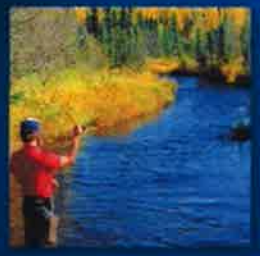

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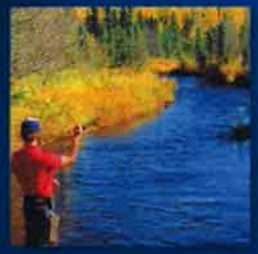
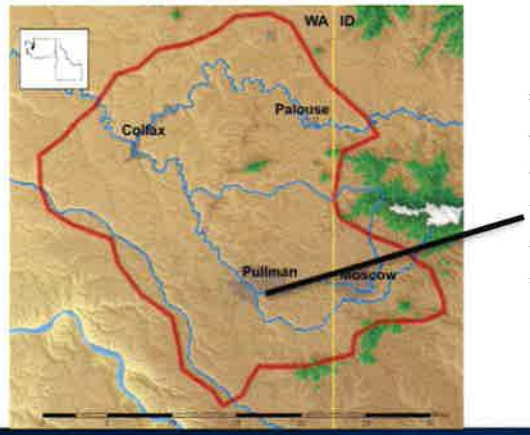


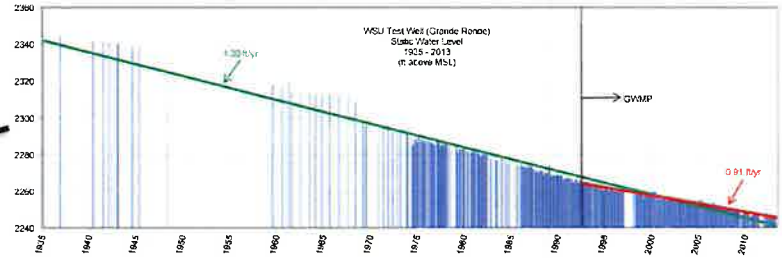
Other Aquifers

✓Working to evaluate needs in other aquifers and develop process for evaluation of projects

✓Anticipate involvement in the Big Wood, Treasure Valley, and Palouse over the next year

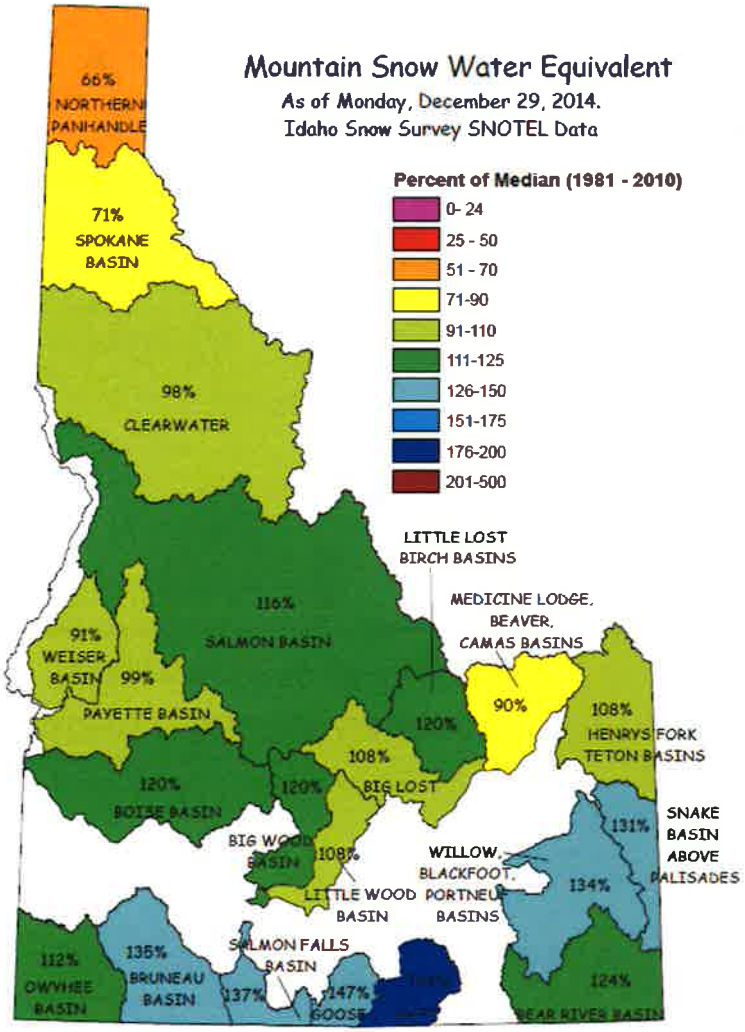
Moscow/Palouse Basin – Deep aquifer dropping



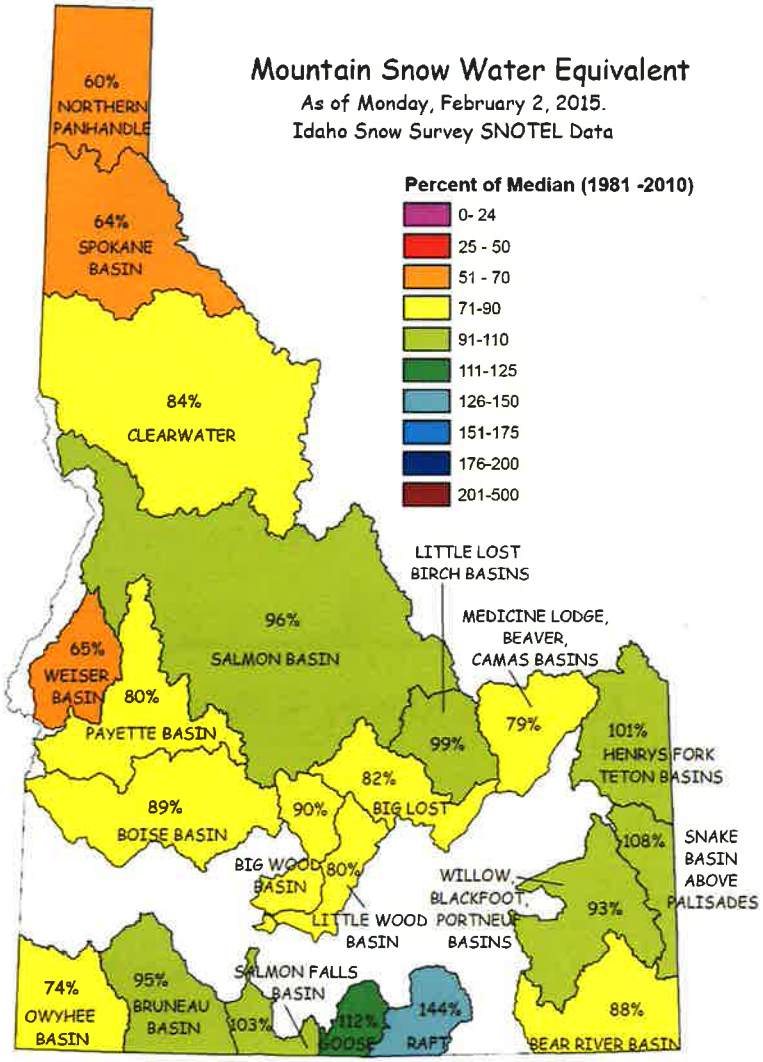


Snow Pack Maps

December 29:

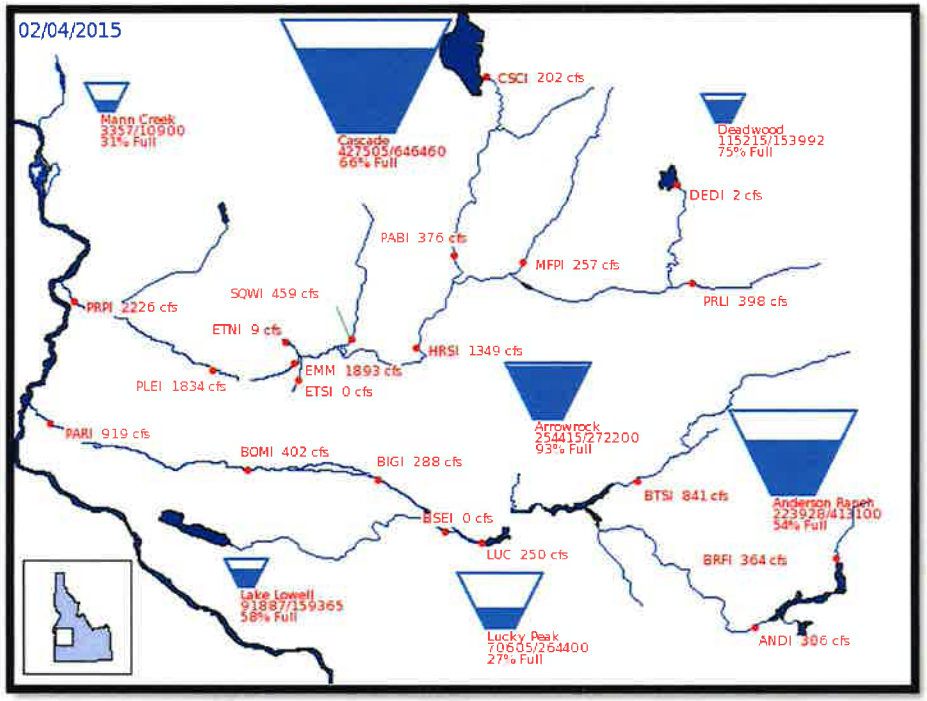


February 2:

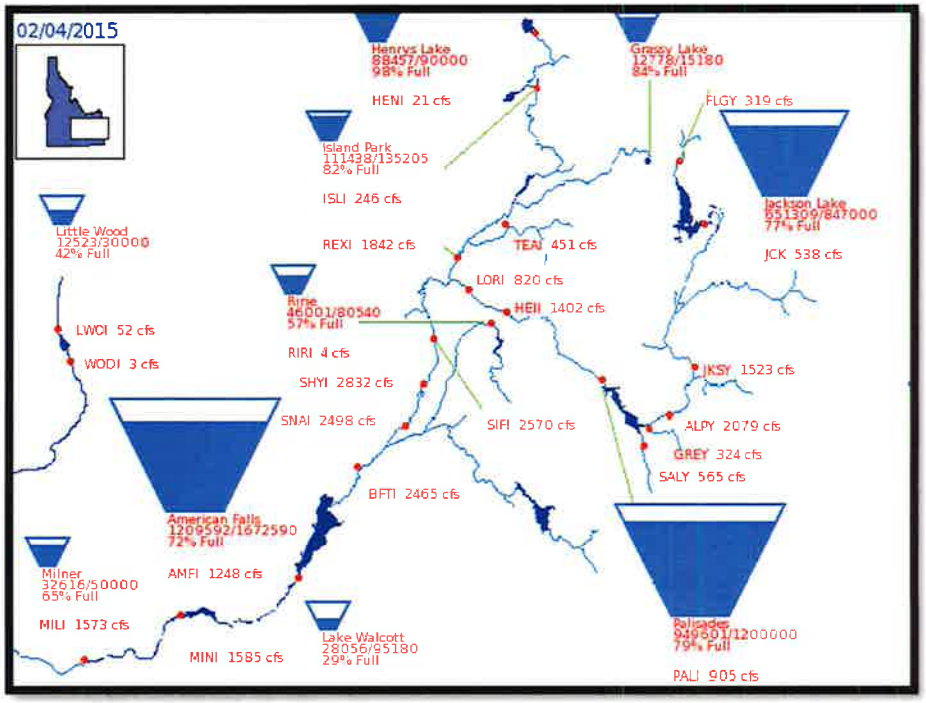


Reservoir Contents

Boise System – 58% of Capacity
Payette System – 68% of Capacity



Upper Snake – 74% of Capacity



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Storage Projects – Making Progress

Weiser-Galloway - new 750,000 AF reservoir

- Completed geotechnical studies, nearly complete with operational studies
- Received FERC preliminary permit
- Next items: Weiser River Trail relocation study, economics of flow augmentation exchange, define needed environmental studies

Island Park – enlargement of Island Park Reservoir by 30,000 AF

- Highest priority from Henrys Fork Basin Study
- Raise spillway by 3 feet
- Developing agreement with Bureau of Reclamation
- Detailed Land impacts analysis

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Water Resource Board

Storage Projects – Making Progress

Arrowrock – enlargement of Arrowrock Reservoir by 300,000 AF

- Partnering with Corps of Engineers – flood control and water supply
- Study received federal funds from Congress
- Project may include channel conveyance as well as storage
- Draft Feasibility Report & EIS: Fall 2015
- Final Record of Decision: 2017

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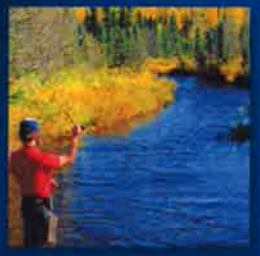
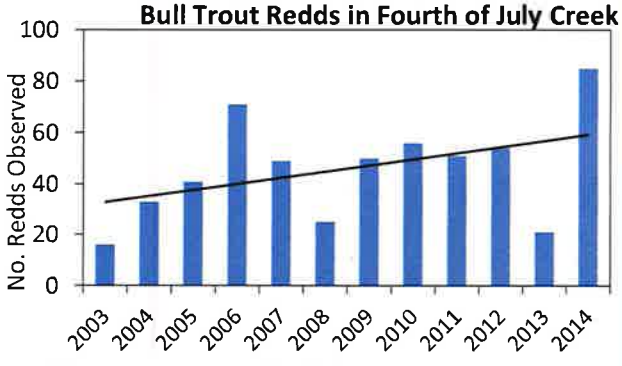


Upper Salmon Basin – Flow Restoration Projects

Chinook Salmon spawning in Upper Lemhi River - 2014

Pumps allowing increased flows in Patterson Big Springs Creek



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Sustainability of Water Supplies

- Governor's office tasked Water Board to develop water sustainability policy
- Need to ensure water supplies for existing uses, for future growth, and for environmental purposes
- Trend of switching to higher-water-use crops on existing acres is something we will have to consider

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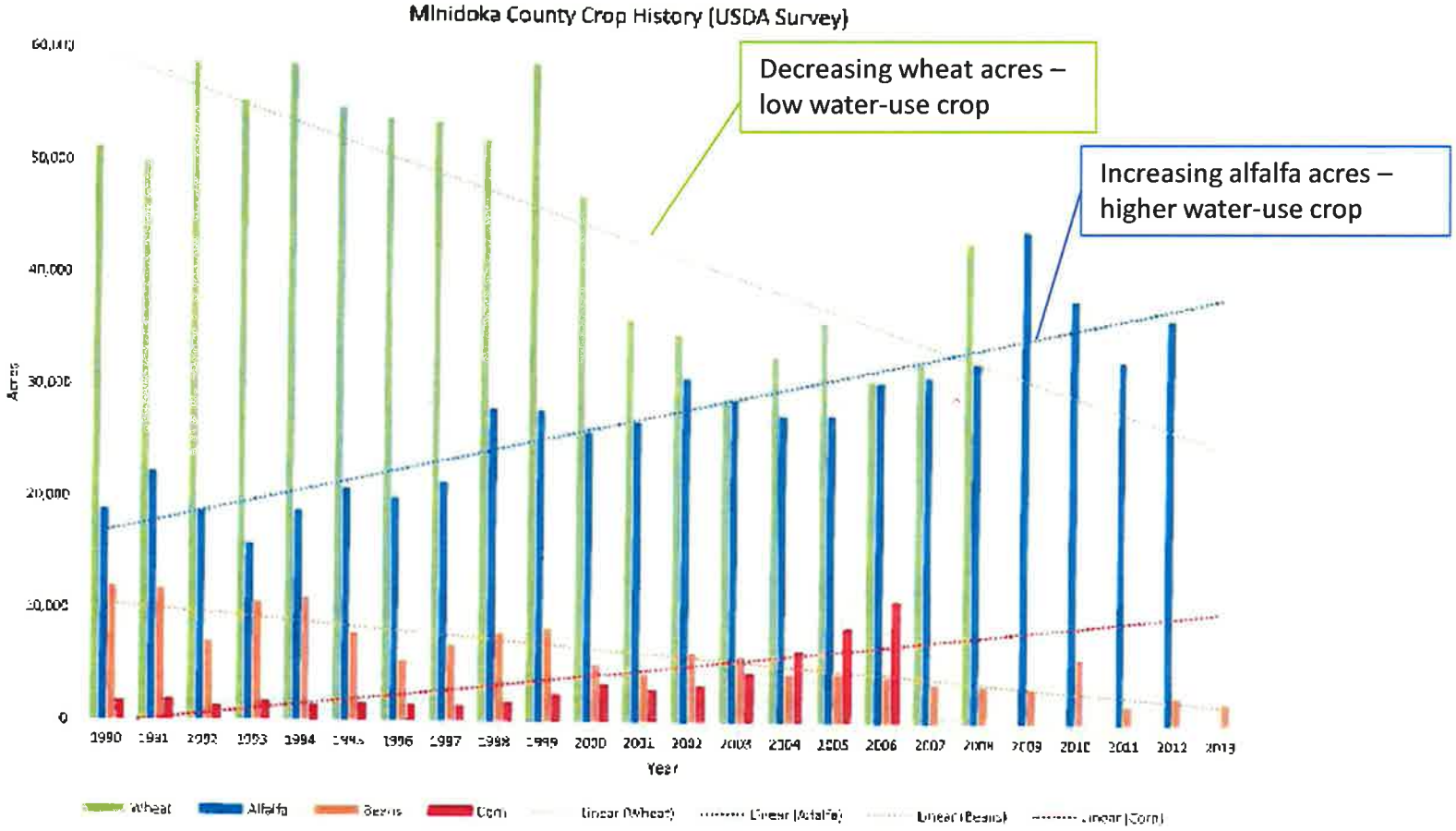
Water Resource Board

Sustainability of Water Supplies



Sustainability of Water Supplies - Conservation

City of Meridian – construction of system to deliver treated wastewater for park irrigation

Twin Falls Canal Company – construction of Kinyon Pond regulating reservoir to reduce operational spills

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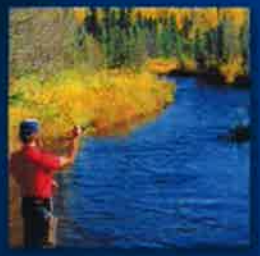
Water Resource Board



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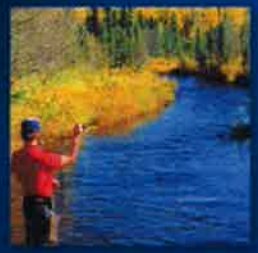


Water Board touring Bear Lake facilities

Our Commitment to You

- Funding is needed and extremely helpful but is limited
- Leverage water user and federal funds
- Our commitment to ensure efficient and effective use of funds to address water challenges

Department of Water Resources

2015 Legislative Presentation

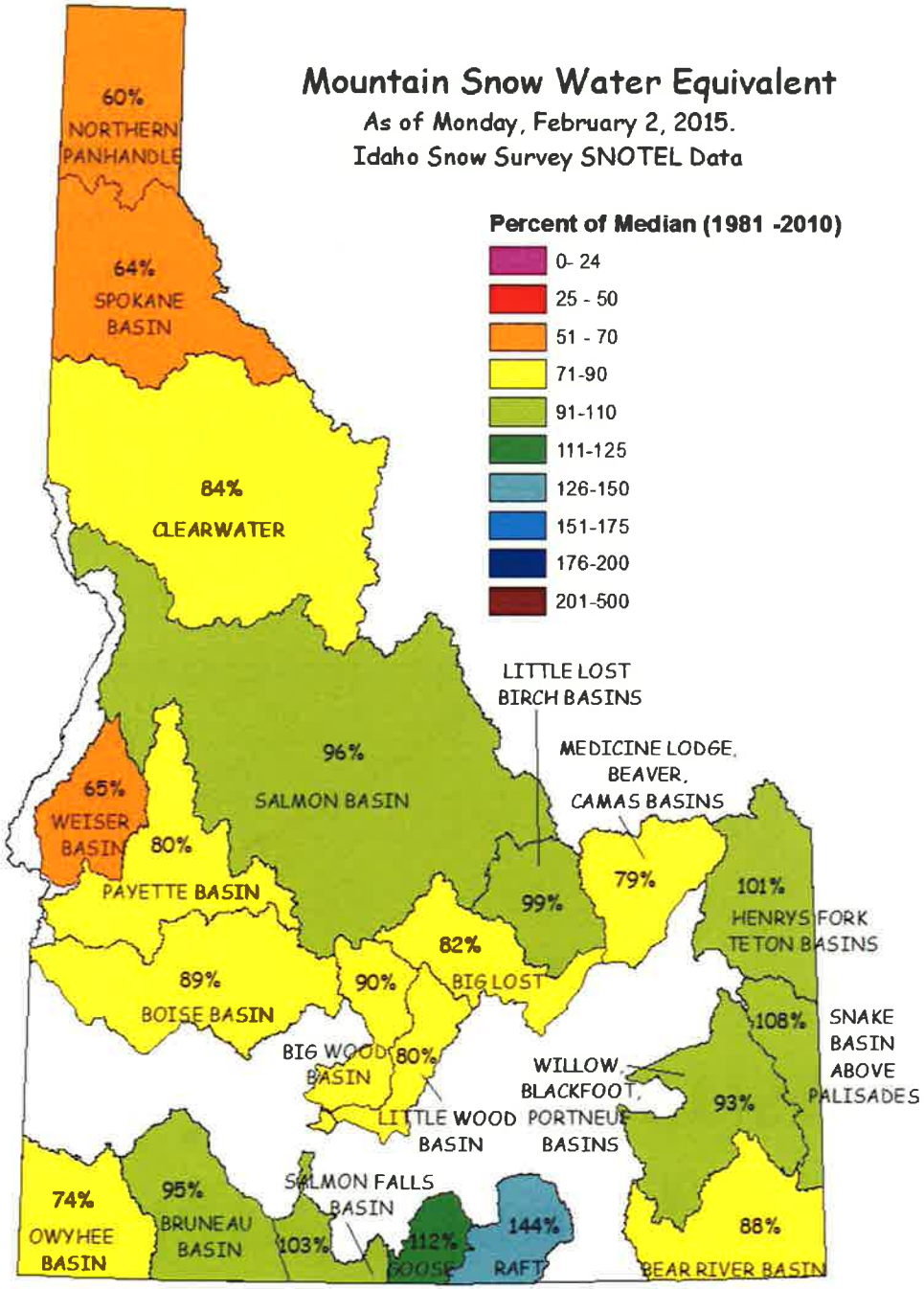
Gary Spackman
Director

February 5-6, 2015

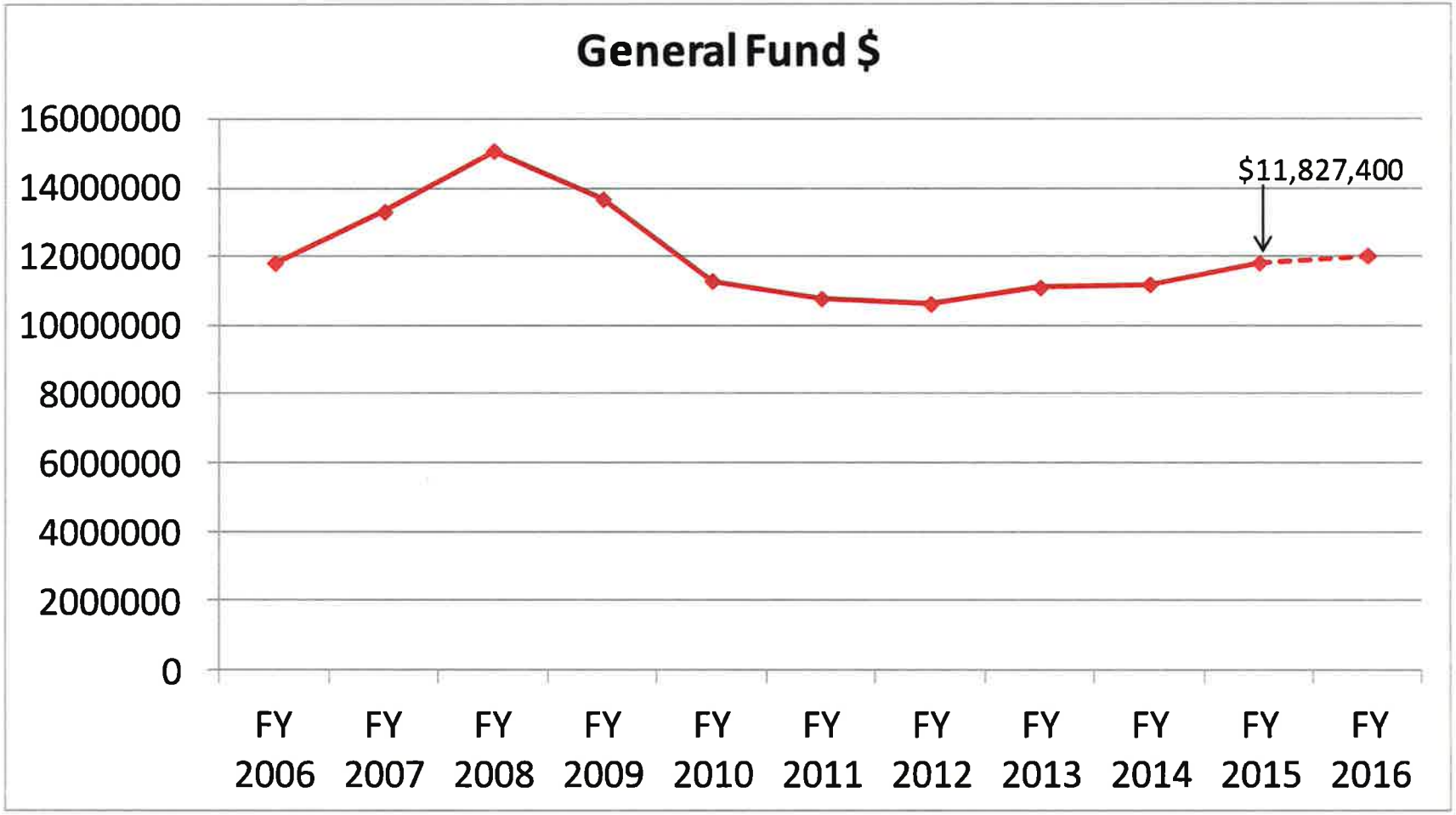
Mountain Snow Water Equivalent

As of Monday, February 2, 2015.

Idaho Snow Survey SNOTEL Data



IDWR General Fund Appropriation
10 Year Comparison



Adjudication –Palouse River Basin

Reservoir Fill/Refill – Flood Control

Reservoir Fill/Refill – Flood Control

Reservoir Fill/Refill – Flood Control

Evaluation of Areas where Alternative Seal Depths may be Warranted

- Island Park – This is an area which has historic bacterial contamination with known illness.
- Wood River Valley – This is an area where a number or waivers have been granted because of the highly permeable coarse gravel and sand
- Donnelly Area – This is an area where glacial deposits consisting of sand, gravel, silt and clay are present and ground water is very shallow.

Surface Water Coalition Call

- Remand from Judge Wildman requires a rewrite of the order to determine dificient supply to senior surface water users
  - Requires preseason prediction of supply and mitigation
  - Requires midseason adjustment and additional mitigation
  - Requires safety factors to protect senior against inaccurate predictions

Island Park

- At least 82 people became sick from *Shigella sonnei* bacteria in 1995 from poorly sealed wells
- Studies in the area show that the ground water and surface water are in hydrologic connection
- Deeper seals have been required since 1996
- Health District indicated that most of the contamination has been eliminated by installing deeper seals from the surface to the production zone
- The Department will continue to require deep seals to prevent illness and protect wells in the area

Wood River Valley

- Department and USGS studies document coarse sediments comprise the aquifer
- Aquifer is highly conductive with no confining layers
- Hydrogeologic conditions in the Wood River Valley are similar to the Rathdrum Prairie Aquifer
- The Department has agreed that a reduction of the minimum surface seal to 18 feet would be consistent with requirements in the Rathdrum Prairie

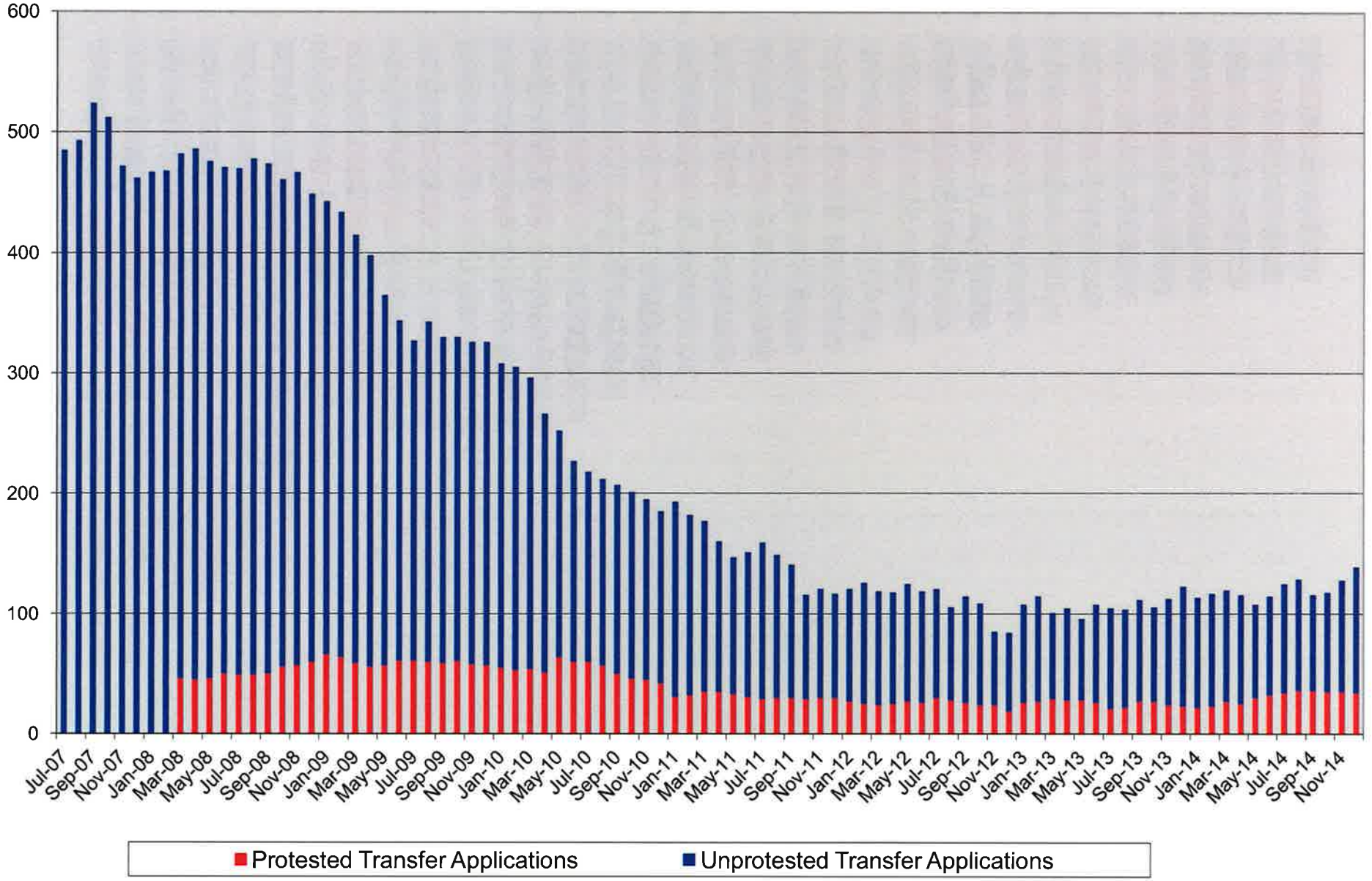
Donnelley Area

- Department studied the geology and hydrogeology in the Donnelly area
- The upper fine grained sediments are oxidized with low yields but good water quality
- Deeper sediments are coarse, under reduced conditions, show artesian pressure and poor water quality with dissolved iron and sulfur

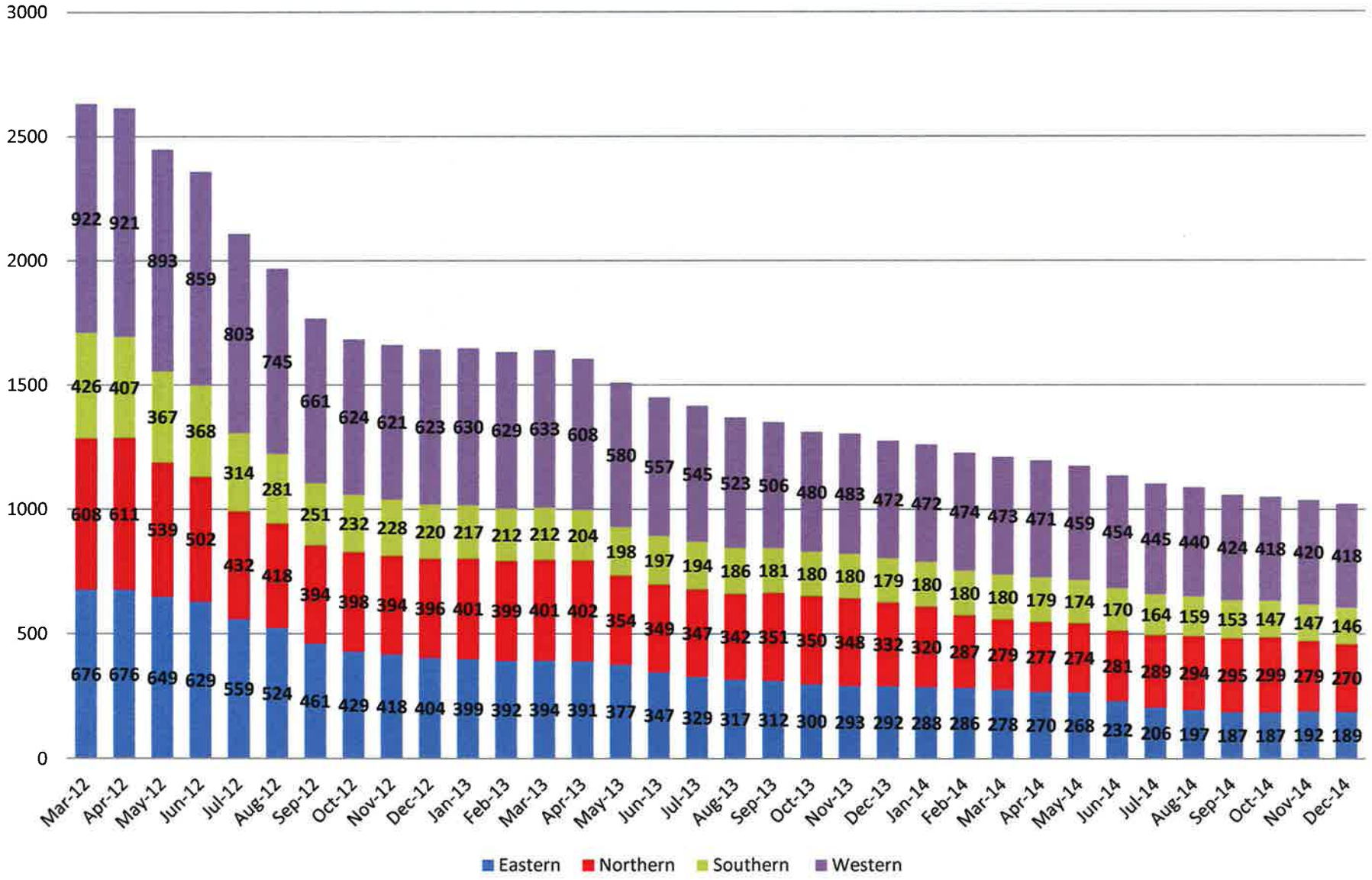
Donnelley Area

- The 38 foot minimum seal is appropriate for the Donnelly Area based on the hydrogeologic conditions
- Wells 38 feet or less can install an 18-foot seal
- If the well is deeper than 38 feet, a 38-foot seal or deeper is required to prevent comingling of aquifers of different pressure and water quality
- Alternative surface seal depths can be evaluated through the waiver process on a case by case basis

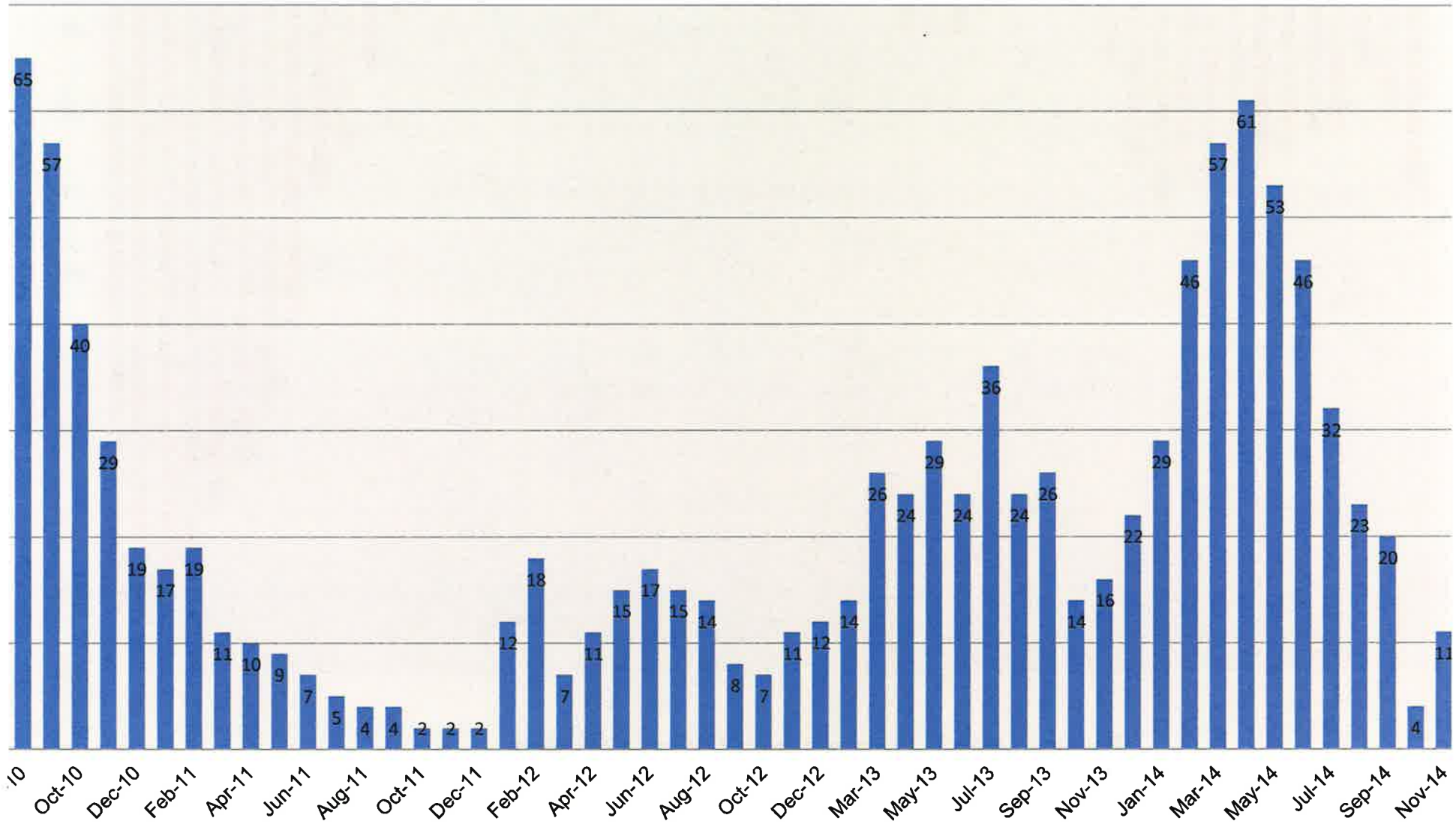
IDWR Active Transfer Applications



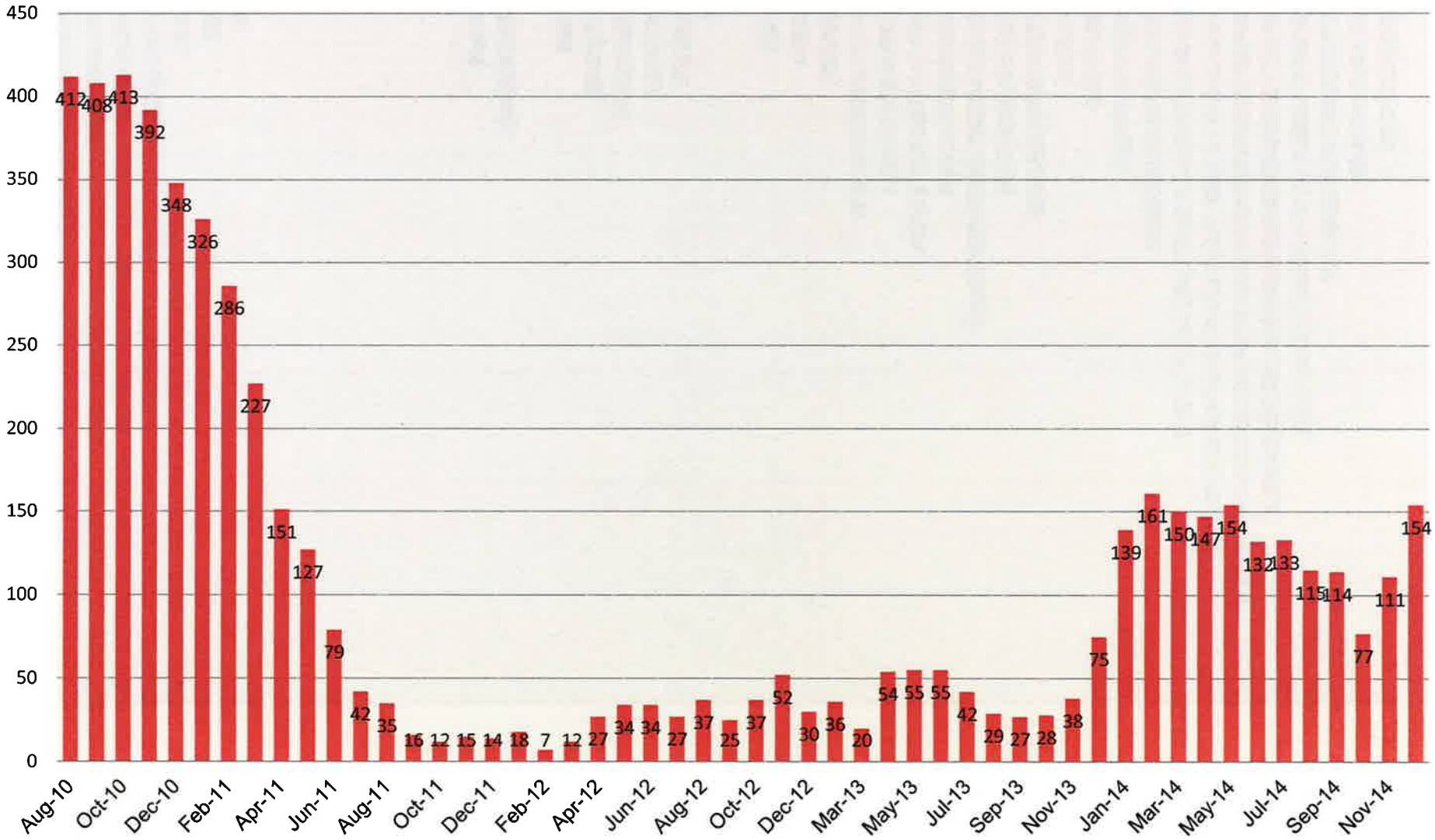
Total Permits Requiring A Field Exam



IDWR Water Supply Bank Rental Applications Pending



IDWR Water Supply Bank Lease Applications Pending



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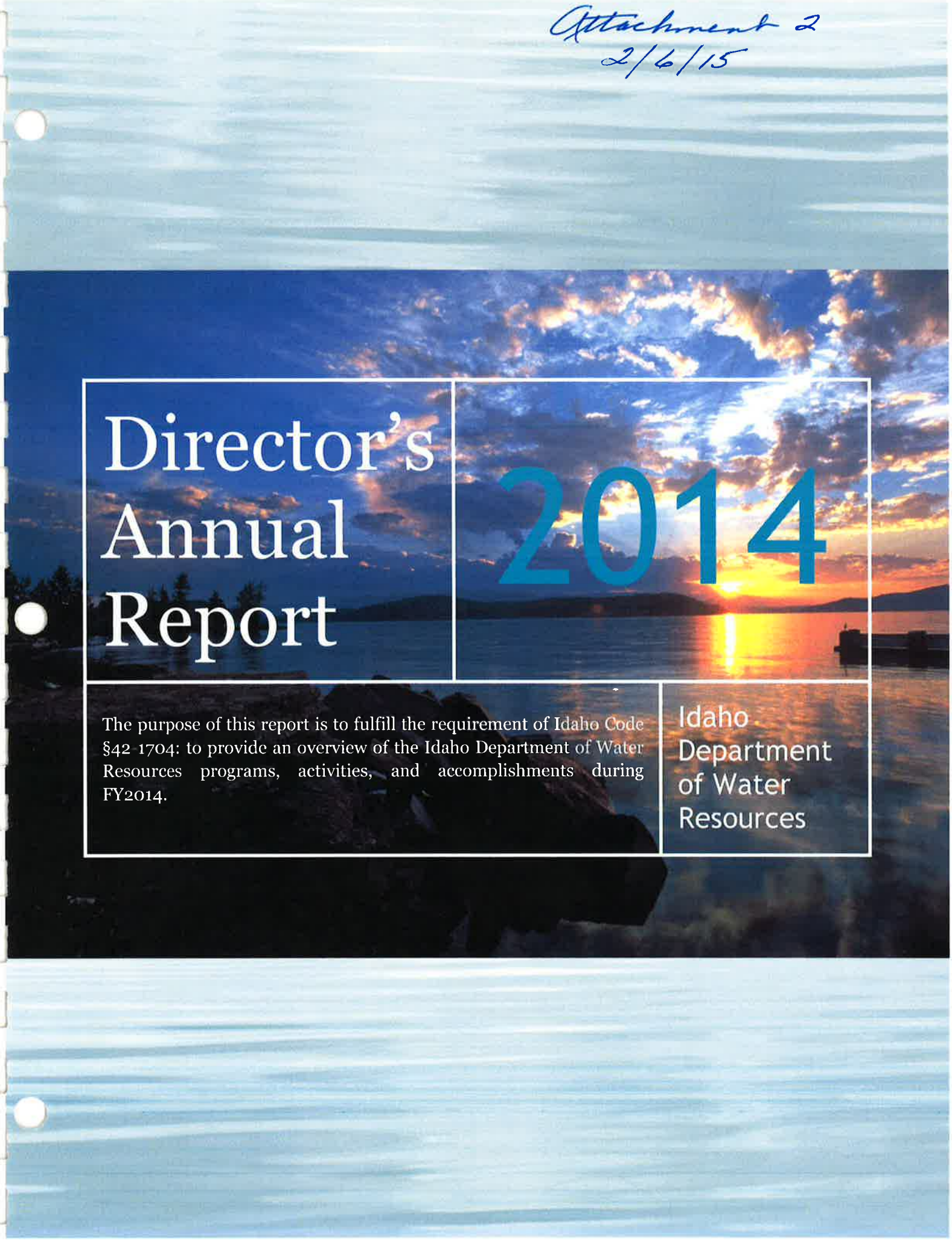

Director's Annual Report 2014

The purpose of this report is to fulfill the requirement of Idaho Code §42 1704: to provide an overview of the Idaho Department of Water Resources programs, activities, and accomplishments during FY2014.

Idaho Department of Water Resources

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Preface

The Idaho Department of Water Resources (IDWR) Director's Annual Report fulfills the requirement of Idaho Code §42-1704:

> The director [of the Idaho Department of Water Resources] shall make and render to the governor, annually, or oftener, if required, full and true reports of the work performed by the department, which reports shall contain any recommendations he may have to make in reference to legislation affecting the department.

This report provides an overview of IDWR programs, activities, and accomplishments during FY2014.

Introduction

The Idaho Department of Water Resources (IDWR) actively guides, manages, and plans for the use and conservation of Idaho's water resources. IDWR serves the people of Idaho and protects their welfare by:

IDWR actively guides, manages, and plans for the use and conservation of Idaho's water resources... to sustain Idaho's economy, ecosystem, and the resulting quality of life.

- administering the permit and license system for the establishment of water rights;
- ensuring the distribution and use of the state's water resources are fair and equitable in accordance with vested water rights and Idaho law;
- assisting the courts in adjudication of water rights through preparation of surveys and reports of water uses;
- supervising the licensing of water-well drillers and the development of minimum water well construction standards to protect ground water resources against waste and depletion;
- reviewing and approving engineering plans and specifications for construction of water storage structures and inspection during and after construction to assure safety and adequacy of design; and
- collecting and disseminating data on the extent, location, and nature of the water resources of the state.

By fulfilling these responsibilities, IDWR ensures water is conserved and available to sustain Idaho's economy, ecosystem, and the resulting quality of life.

Organization

Agency Overview

The Idaho Department of Water Resources (IDWR) is headed by Director Gary Spackman (Director) who was appointed to his position by Governor C.L. "Butch" Otter on July 11, 2012, after having served as Interim Director since July 16, 2009.

At the close of FY2014, IDWR employed 152 full-time employees at five state-wide offices that provide various services to Idaho citizens (Figure 1): State Office, Boise (1); Western Regional Office, Boise (2); Northern Regional Office, Coeur d'Alene (3); Southern Regional Office, Twin Falls (4); and Eastern Regional Office, Idaho Falls (5).

Figure 1: IDWR Office Locations

The offices and employees are divided into various units (Figure 2, page 3), including four administrative bureaus: the Water Allocation Bureau, the Water Compliance Bureau, the Technical Services Bureau, and the Planning Bureau. IDWR is also supported by the Legal Services (deputy attorneys general housed at IDWR) and Support Services units. Support Services include Human Resources, Information Technology, Financial, and Administrative Services. All units help fulfill IDWR's mission. However, this report will focus on the activities and benchmarks of the four administrative bureaus and provide a summary of the department's finances.

The Director and other IDWR executive staff also interact with the Idaho Water Resource Board (IWRB) in a level working relationship. The IWRB sets long term vision and policy, and finances, constructs, and operates water projects on behalf of the state. The Director is charged with water right administrative responsibilities and other regulatory functions.

Idaho Department of Water Resources
Organizational Chart

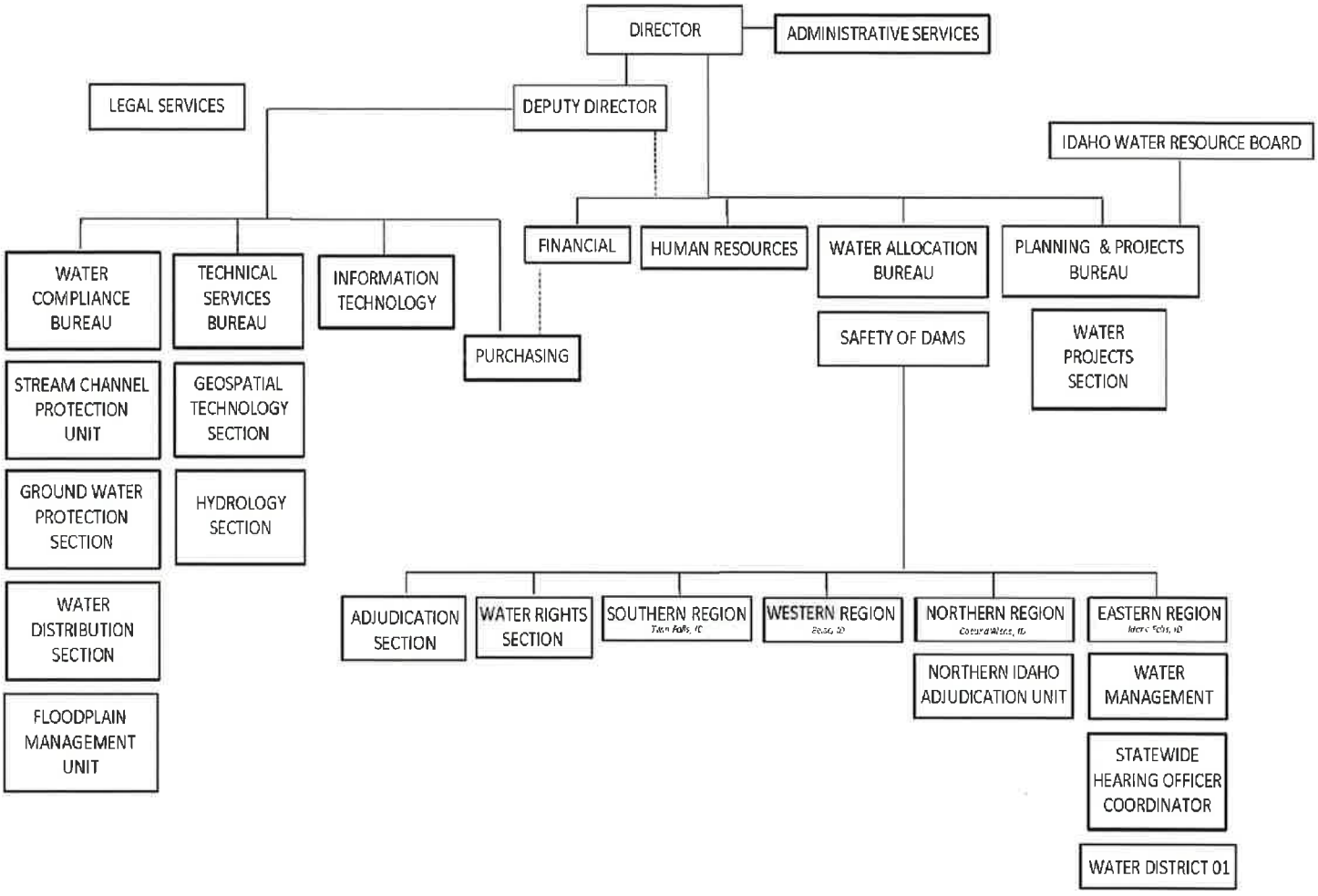


Figure 2: IDWR Organizational Chart

Water Allocation Bureau

The Water Allocation Bureau addresses all administrative water right proposals and recommends elements of water rights during a water right adjudication.

Water Allocation Bureau staff is located at the state office and all regional offices. Regional office staff carries out bureau programs as directed and supported by state office staff. The Water Allocation Bureau is divided into four units: the Water Rights Section, the Water Supply Bank Program, the Adjudication Section, and the Safety of Dams Program.

Water Rights Section

The Water Rights Section (Water Rights) oversees all aspects of water right permitting, licensing, and transferring. Water Rights consider applications for:

- new water rights (applications for permit),
- water right transfers and exchanges,
- ownership changes,
- water right licenses, and
- temporary changes of water appropriation.

In addition, Water Rights archives all current state water right records. Idaho spent over $90 million adjudicating the water rights in the Snake River Basin and a water right adjudication is ongoing in northern Idaho. As a result, Idaho's water right records are more accurate today than at any time in state history. Still, water use patterns change over time. Without the ability to monitor and update water right records, their accuracy will erode over time, undermining the success of the adjudications. A better process is needed to ensure compliance with reporting of water right ownership changes. Reporting is mandatory, but timely compliance is not comprehensive. Online reporting should be considered, even though submittal of supporting documentation and credit card payments may pose challenges.

Applications for Permit

Applications for permit request the approval of a new water right. Despite a 25% increase from FY2013 to FY2014, the number of applications for permits has declined from historic levels. Consequently, IDWR has been able to reduce its backlog of applications by about 25% compared to FY2010. Nevertheless, a backlog of roughly 600 applications remains. More than half of this backlog is protested applications that may require time-consuming hearings. The backlog slows the decision-making process for economic projects proposing new uses of water. In FY2014, the median processing time for an application for a new water right was 0.4 years.

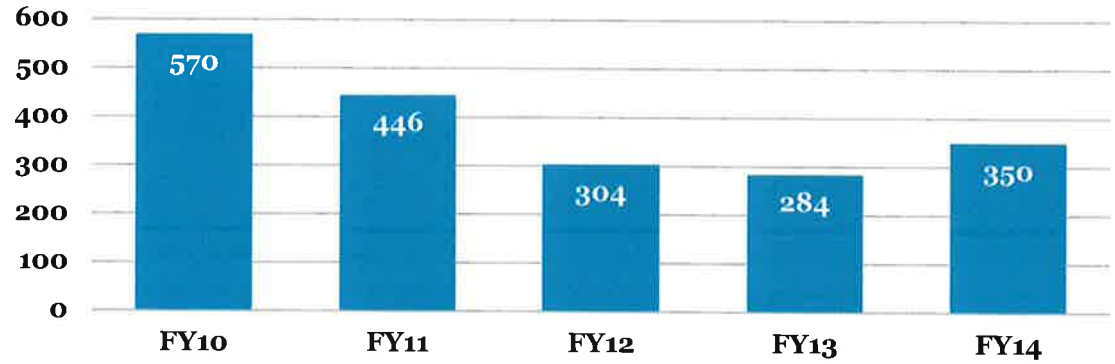


Chart 1: Received Applications for Permit FY2010–FY2014

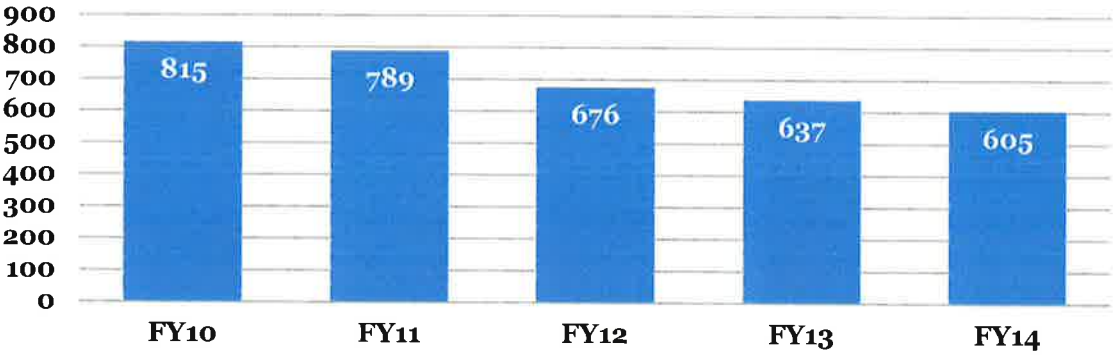


Chart 2: Pending Applications for Permit FY2010–FY2014 (Does not include 645 applications held due to moratoriums.)

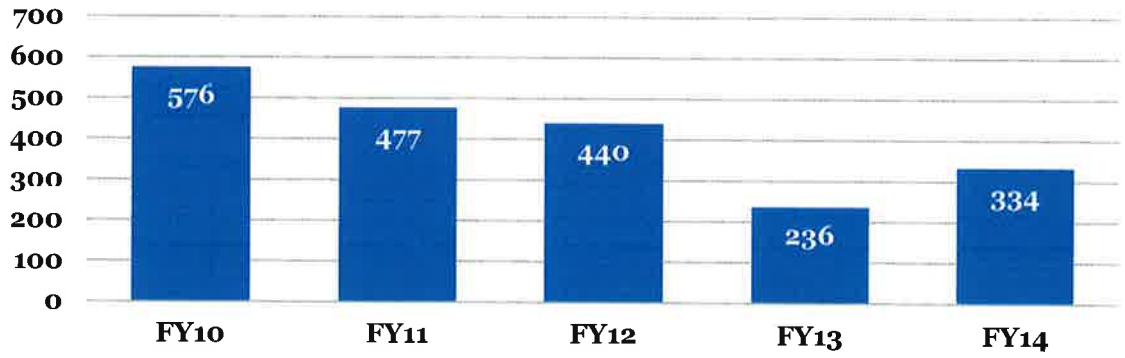


Chart 3: Issued Water Appropriate Permits FY2010–FY2014

Transfer Applications

Transfer applications propose a change in an existing water right, such as the point of diversion. The number of transfer applications increased by about 27% in FY2014 compared to FY2013. Transfers are increasingly important for new water projects because new water rights for consumptive uses cannot be issued in many parts of Idaho. Because IDWR prioritizes transfer processing, the agency absorbed the additional workload without substantially increasing the backlog of pending applications. In FY2014, the median processing time for an application for transfer was 0.7 years. Maintenance of approximately 100 pending transfers is a reasonable number of applications in process without any backlog.

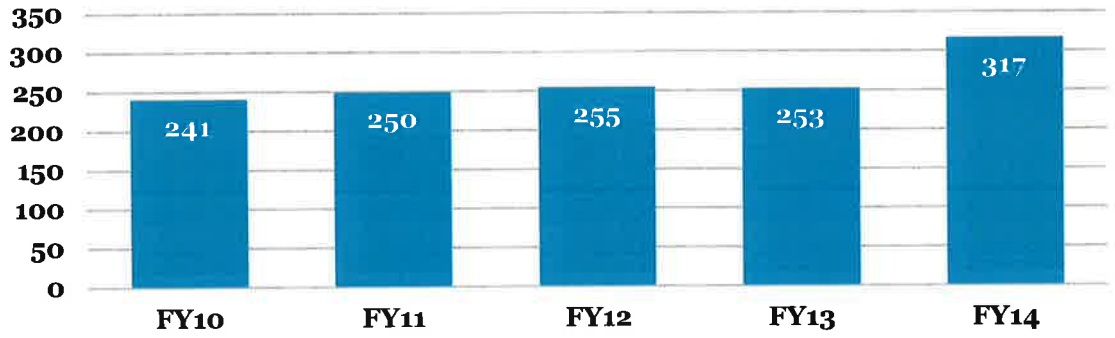


Chart 4: Received Transfer Applications FY2010–FY2014

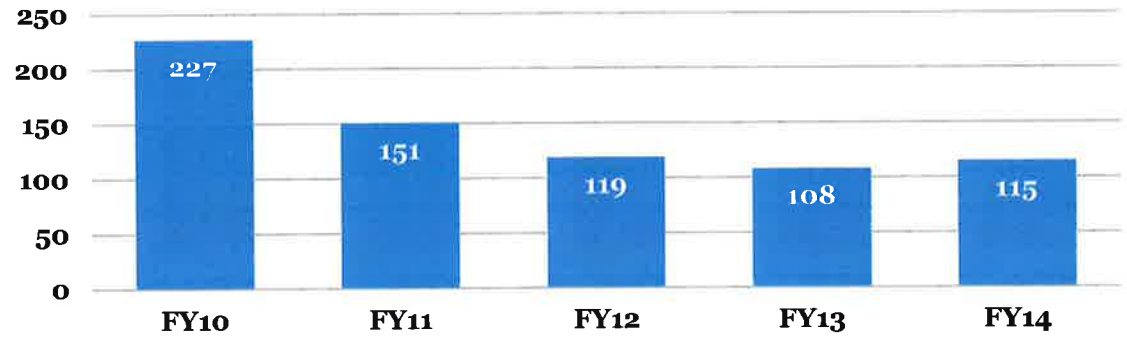


Chart 5: Pending Transfer Applications FY2010–FY2014

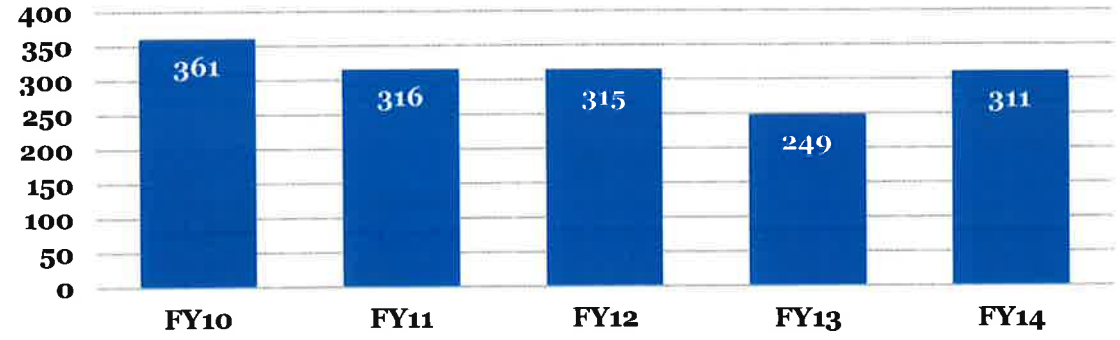


Chart 6: Resolved Transfer Applications FY2010–FY2014

Ownership Changes

IDWR has experienced a 75% increase in water right ownership changes compared to FY2010. Maintaining current ownership records is critical to water right administration. The increased workload, combined with significant clerical staff turnover in some IDWR offices, has resulted in a greater backlog compared to recent years. The current backlog is approximately 25% of the annual workload.

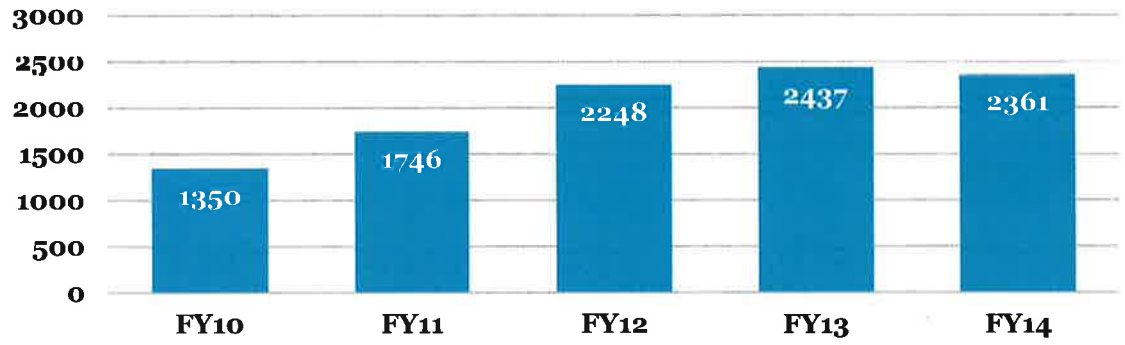


Chart 7: Received Water Right Ownership Changes FY2010–FY2014

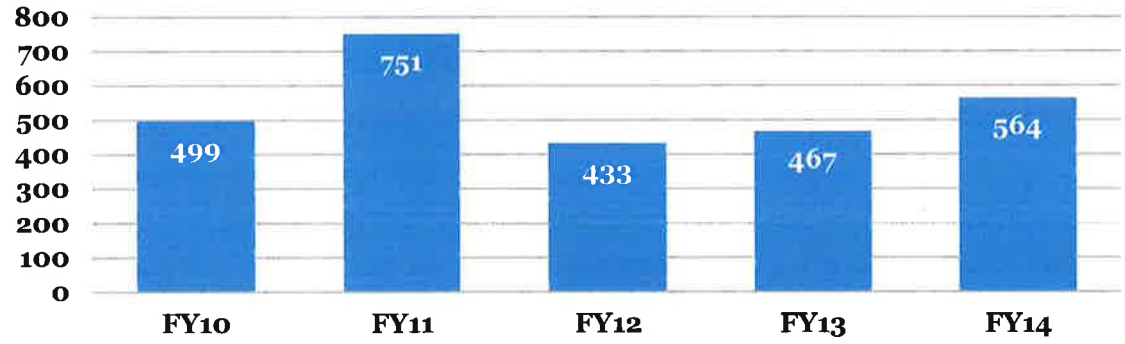


Chart 8: Pending Water Right Ownership Changes FY2010–FY2014

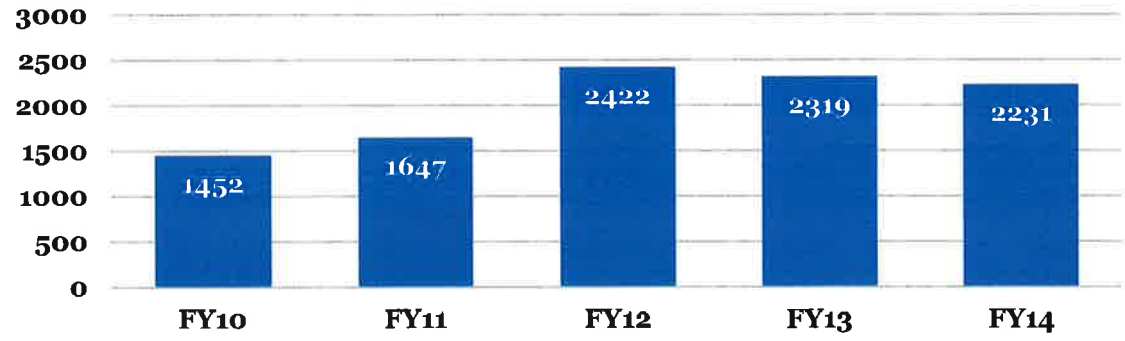


Chart 9: Processed Water Right Ownership Changes FY2010–FY2014

Water Right Licensing

For decades water right licensing has taken a backseat to the processing of applications for permit, applications for transfers, and Water Supply Bank rentals. However, water right licenses provide confidence to lenders and investors as security for operating loans or investment capital. The Director re-emphasized the licensing effort in 2012, in part by borrowing staff members from other IDWR functions. As a result of this additional effort, combined with a reduction in the number of new proofs of beneficial use being submitted, the licensing backlog has been cut in half compared to FY2011. Despite this progress, the momentum is slowing and the number of new permits increased in FY2014. Consequently, complete elimination of the backlog does not seem imminent. The cause of the slowdown is a combination of staff turnover and the need for staff members to absorb the increase in water right applications, transfer applications, Water Supply Bank rentals, temporary transfers, and ownership change notices.

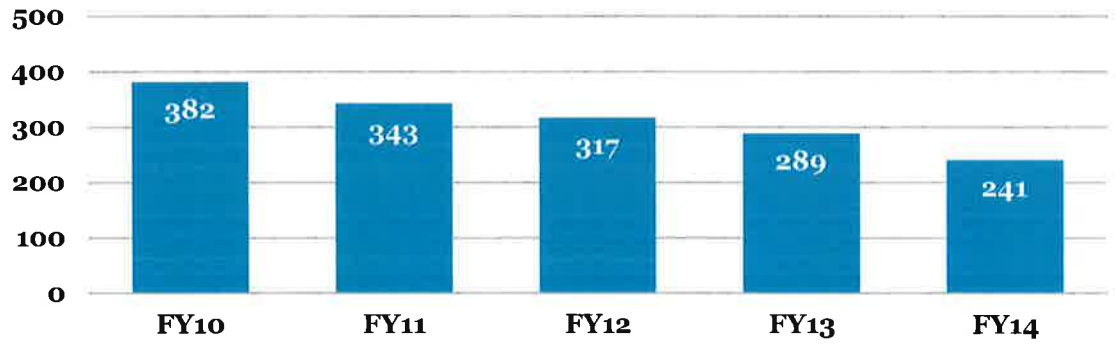


Chart 10: Received Water Right Licenses' Proof of Beneficial Use FY2010–FY2014

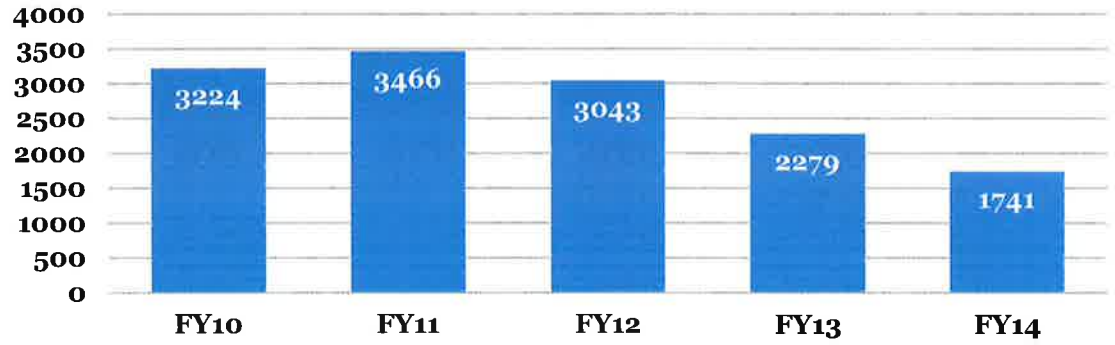


Chart 11: Pending Water Right Licenses FY2010–FY2014

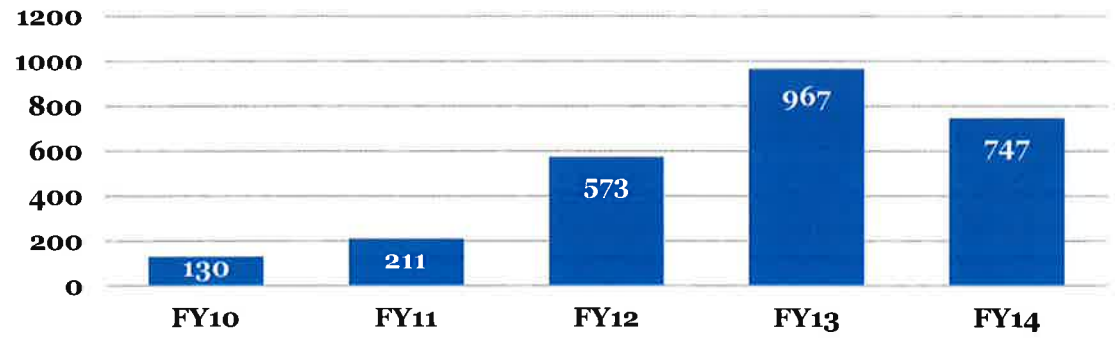


Chart 12: Issued Water Right Licenses FY2010–FY2014

Temporary Water Rights

Temporary water rights support road construction projects, mineral exploration, and other short-term projects. Temporary water right applications are approved or denied quickly, so projects may proceed (or find alternatives) without delay. Demand for temporary water rights declined slightly in FY2014, but it remains consistent with historic levels.

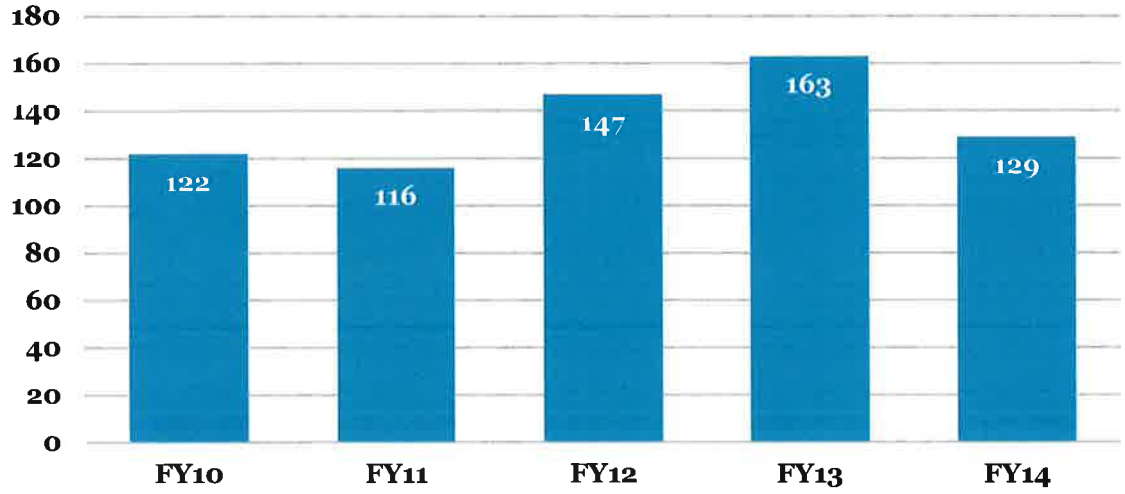


Chart 13: Issued Temporary Water Rights FY2010–FY2014

Temporary Water Right Transfers

Temporary transfers allow water users to adjust their water use to meet drought conditions. Demand for temporary water right transfers was extremely high in FY2014 due to drought declarations in Blaine, Butte, Clark, Custer, and Lincoln counties. While negligible in wet years, this program can require substantial effort from IDWR in dry years. This shift in focus temporarily diverts resources from other programs, especially water right licensing.

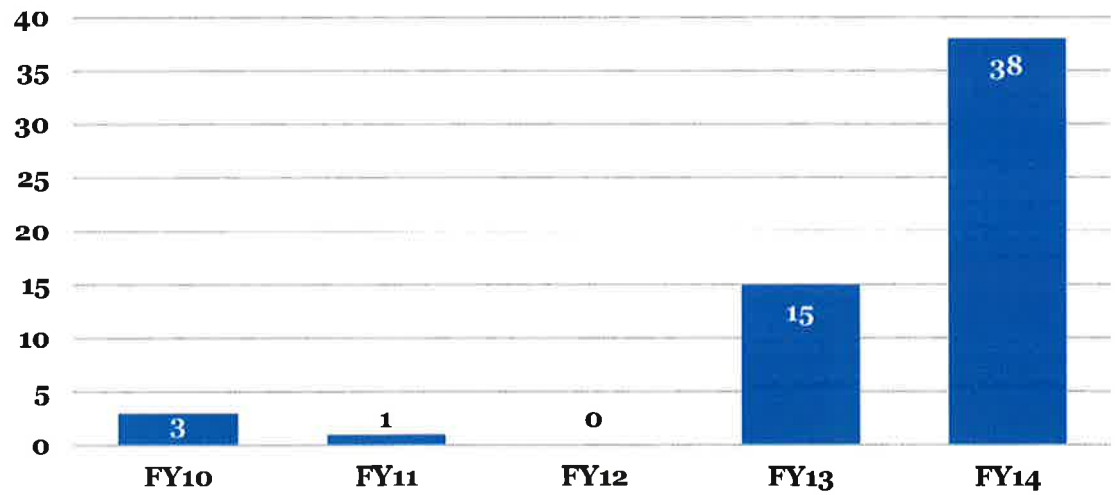


Chart 14: Temporary Water Right Changes Issued FY2010–FY2014

Water Supply Bank Program

IDWR operates the Water Supply Bank (WSB) lease and rental programs for the Idaho Water Resource Board (IWRB). The WSB has two main components: 1) leases of water rights into the WSB, comparable to deposits of assets in a traditional bank, and 2) rentals of water rights from the WSB, comparable to loans of assets from a traditional bank.

Water Supply Bank Leases

Demand for water supply bank leases increased dramatically in FY2014. Much of the increase can be attributed to five year leases issued in FY2009 requiring renewal in FY2014. The end of year workload increased due to the large number of lease applications submitted combined with an increase in rental applications, which are processed ahead of leases.

Chart 15: Received WSB Lease Applications FY2011–FY2014

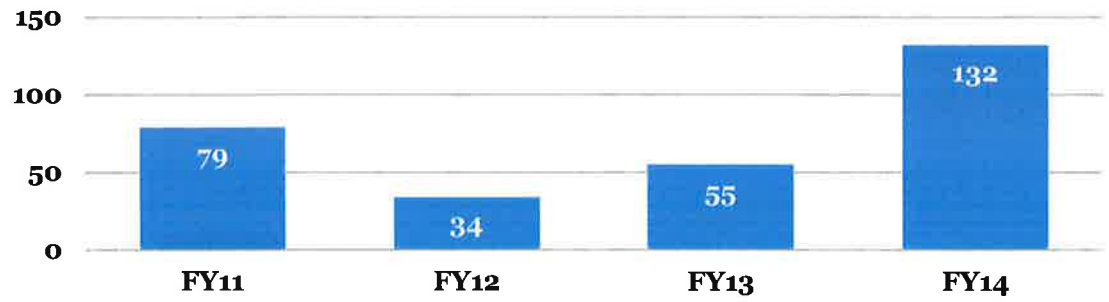


Chart 16: Pending WSB Lease Applications FY2011–2014

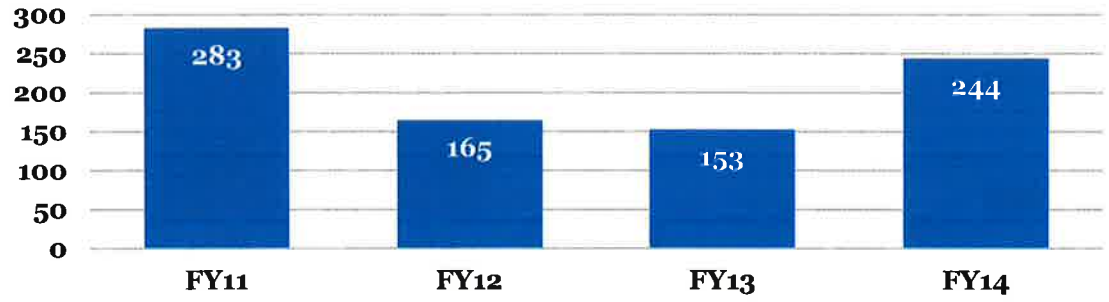


Chart 17: Completed Water Supply Bank Lease Applications FY2010–FY2014

Water Supply Bank Rentals

Demand for water supply bank rentals continued the steady growth experienced over the last few years. Anecdotally, some demand increase is attributable to high farm commodity prices in recent years.

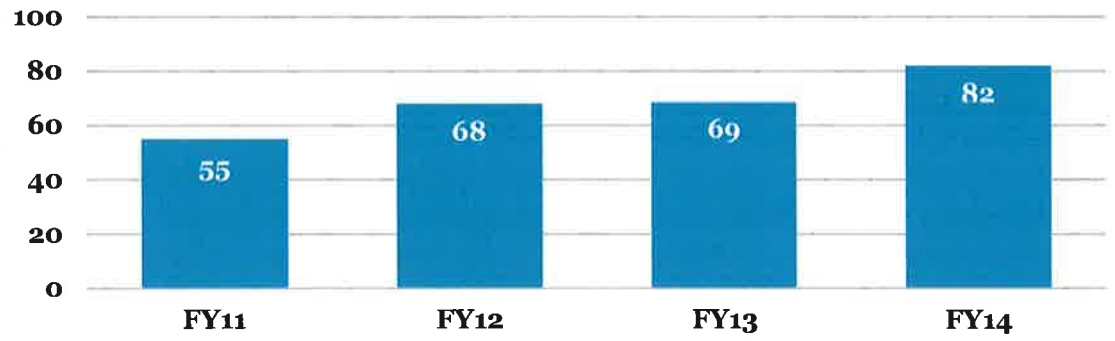


Chart 18: Received WSB Rental Applications Received FY2011–FY2014

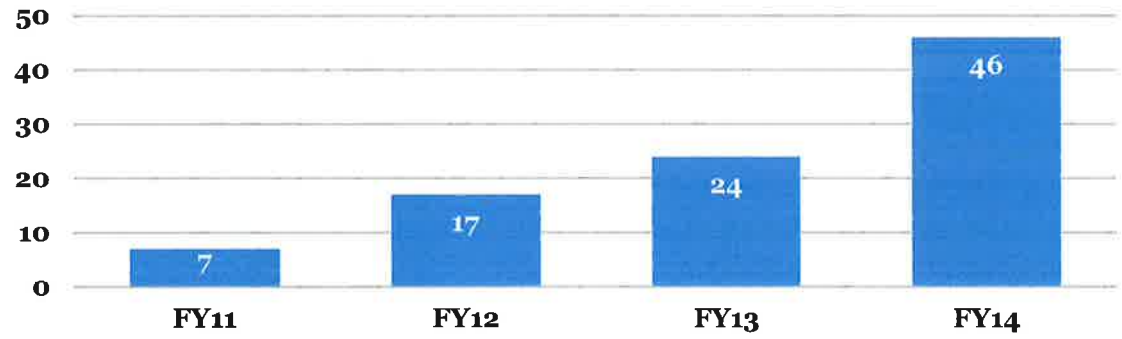


Chart 19: Pending WSB Rental Applications FY2011–FY2014

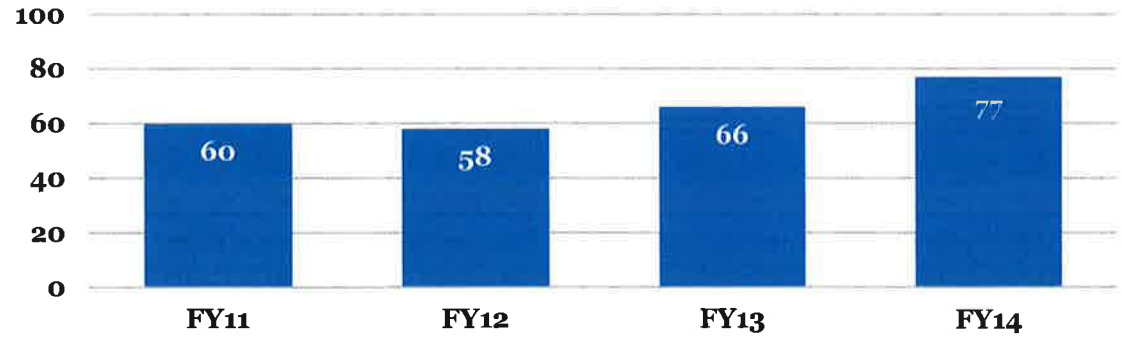


Chart 20: Completed Water Supply Bank Rental Applications FY2010–FY2014

The lease and rental fees authorized by rule continue to fall short of the cost of operating the Water Supply Bank. The shortfall has been covered from the general fund appropriation for IDWR. Consequently, the IWRB may review options for making the Water Supply Bank program fiscally independent.

Adjudication Section

The Adjudication Section is charged with accepting, evaluating, and recommending the water rights in the Snake River Basin Adjudication (SRBA) and the Northern Idaho Adjudication (NIA). Adjudication staff assigned to the SRBA work in the Western Regional office and state office (both in Boise), while staff for the NIA work in the Northern Region office in Coeur d'Alene with support staff in Boise.

A general water right adjudication completely and accurately determines and records the existing water rights within a river basin. Following completion of a water rights adjudication, IDWR will have a complete and accurate compilation of all water rights and can deliver water to water users who are entitled to the water when disputes about use and delivery arise. Additionally, the water right compilation roughly estimates total water use. By more accurately estimating total water use in Idaho, IDWR can also estimate how much water is available for future development of water resources.

Snake River Basin Adjudication

The Snake River Basin Adjudication (SRBA), a massive administrative and legal process, began in 1987 and decreed nearly 160,000 individual claims for water rights in the Snake River Basin area.

The Final SRBA late claims Director's Report was filed in December 2013. After 27 years of effort, the Final Unified Decree for the SRBA was signed August 25, 2014, essentially completing this vast undertaking.

After 27 years of effort, the Final Unified Decree for the SRBA was signed August 25, 2014, essentially completing this vast undertaking.

Fifty one outstanding claims still await a final recommendation and decree. These late claims granted by the court have been or will be reported on an expedited basis. The majority of these claims will be resolved by the end of 2014.

Coeur d'Alene-Spokane River Basin Adjudication

Approximately 11,370 active claims existed in the database for the Coeur d'Alene-Spokane River Basin Adjudication (CSRBA) basins at the end of FY2014, including a total of 447 claims based on federal law. Three hundred and sixty four of the tribal and federal reserve claims were sent to the court in March 2014. The remaining 83 claims based on federal law are for livestock use only. The basis for the livestock claims is Public Water Reserve 107 (PWR 107). The PWR 107 claims will be sent to the court when the Director's Reports are filed for the state law based claims in their respective basins.

The Director's Report for Hangman Creek (Basin 93) was filed in March 2014, which contained 358 recommendations. Only two objections to the elements reported in the Basin 93 Director's Report were filed by the objection deadline of September 29, 2014.

The Preliminary Director's Report for the Saint Maries River Basin (Basin 92) was prepared for mailing late in FY2014, and that report contained 802 "Active" and 50 "Disallowed" recommendations.

The entire NIA is anticipated to complete in approximately one year; the projected date for the final IDWR recommendations to the court is November 2015.

Safety of Dams Program

The IDWR Safety of Dams Program is responsible for all aspects of the 450 water storage dams and 20+ mine tailings impoundment structures in Idaho, including:

- reviewing and approving design plans for dam construction and repair;
- regularly inspecting new and existing dams for safety;
- consulting with dam owners and county emergency personnel to update emergency action/operation plans;
- offering engineering services within the scope of program duties; and
- archiving information related to dams and water storage projects.

Safety of Dams staff members operate at all five IDWR offices, with the state office staff overseeing regional office efforts.

Of the aforementioned activities, two of the most important are listed in Table 1: inspections of existing dams and design review and approval for new construction and repair. Regular inspections (which occur every 1–5 years) and careful review of new construction plans not only fulfill the requirements of Idaho Code §42-1712 but ensure life and property are protected from a catastrophic dam failure.

	2010[1]	2011	2012	2013	2014
Inspections of Existing Dams	127	84	132	141	112
Design Review and Approval for New Construction/Repair		8	7	9	9

Table 1: Safety of Dams Activity Calendar Years 2010-2014

IDWR Safety of Dams prioritizes the inspections of those structures whose failure and uncontrolled release of water would result in significant property damage and/or loss of life. However, IDWR's ability to schedule inspections for all dams in a timely manner for the full inventory of dams has been delayed the past several years. Turnover at the regional offices accompanied by both cutbacks in the state office and difficulty in recruiting and hiring experienced staff have resulted in postponement of inspections for some dams. In addition, the qualified dam inspector at each regional office must spend a portion of their time on work not directly related to dam safety. As a result, strict performance of some services mandated per Idaho Code cannot be

[1] Data is divided by calendar year. Fiscal year data is unavailable. 2014 is year-to-date.

accomplished until staff become available to complete the work, or until/unless existing statutes and rules are revised to reflect reduced services.

The limited staff and time dedicated to Safety of Dams also means some non-essential but useful procedural efficiencies are put aside. Currently, there is neither an adequate nor uniform method to keep a record of designs, inspection reports, and communication, and then convert these documents to digital format. Without being recorded and digitized, access to these important documents is both limited and time-consuming.

However, to help compensate for fewer staff, several processes and procedures have been restructured. IDWR's regional offices now issue storage certificates for all low-hazard dams, a task once administered solely by the state office. IDWR has also updated the Safety of Dams database and provided access for data entry to all regional offices. This effort broadly distributes the workload across several offices, easing the effort for the state office staff.

Water Compliance Bureau

The Water Compliance Bureau ensures the distribution and use of the state's water resources are fair and equitable in accordance with vested water rights and Idaho law by:

- supervising the distribution of water to water users,
- investigating and enforcing violations of water rights and Idaho law,
- protecting ground water resources against waste and depletion,
- minimizing environmental effects due to human disturbance, and
- mitigating the effects of flooding on Idaho communities.

The Water Compliance Bureau is divided into five programs: the Water Distribution Section, the Ground Water Protection Section, the Enforcement Unit, the Stream Channel Protection Unit, and the Floodplain Management Unit.

Water Compliance Bureau staff is located primarily in the state office, with select positions staffed at regional offices. Staff in the regional offices implement bureau programs as directed and supported by state office staff.

Water Distribution Section

The Water Distribution Section supervises the delivery of water from the public resource by ensuring water is used in accordance with valid water rights and by supervising the distribution of water to the water users by priority when there is insufficient water to satisfy all water rights. The Water Distribution Section maintains two main programs to fulfill this responsibility.

- The *Water Measurement Program* provides support related to the control and measurement of water diversion systems.
- The *Water Districts Program* offers assistance to water districts, water measurement districts, and ground water districts.

Water Measurement Program

Originally created to support measurement of ground water on the Eastern Snake Plain Aquifer (ESPA), the Water Measurement Program now functions statewide establishing, maintaining, and implementing state water measurement and reporting standards. Staff works directly with water districts and water measurement districts to implement measurement requirements and programs within the state, including:

- closed conduit and open channel measurement methods;
- diversion and control works for surface and ground water diversions;
- automation, data logging, and telemetry of water diversion and measurement systems; and
- development and maintenance of reporting systems for water diversion measurements.

During FY2014, the Water Measurement Program issued measurement orders for four (4) areas across the state: the Snake River (Milner to Murphy in Water District 02), the Big Lost River (ground water only), Pahsimeroi River (ground water only), and Bannock Creek (surface and ground water). These orders were issued to establish or improve the water delivery infrastructure in new and existing water districts. This infrastructure is necessary for watermasters in these areas to adequately administer water rights decreed in the Snake River Basin Adjudication.

In addition, the Water Measurement Program approved two (2) new water measurement meters. Those water users now required by IDWR order to measure flows have more options when installing IDWR-mandated measuring devices.

Water Districts Program

The IDWR Water Districts Program complies with Idaho Code §42-604, which requires IDWR to create state water districts for public streams or water supplies for which water rights have been decreed by the courts. Idaho Code also authorizes IDWR, through the Water Districts Program, to revise the boundaries of existing districts, combine two or more districts, and/or abolish districts, if necessary.

There are nearly 100 active water districts and sub-districts across Idaho (see Figures 3 - 6, pages 17 – 20). Some districts include thousands of water users and others only a handful. Regardless of size, each active water district employs a watermaster who oversees water distribution within the district. Proper water distribution under Idaho water law and the appropriation system is the primary goal and responsibility of all Idaho watermasters. Daily water distribution, record keeping, measurement, and general district management are the primary duties of each watermaster.

The Water Districts Program supports and supervises the water districts and watermasters by:

- combining, dissolving, or creating new water, ground water, and water measurement districts to facilitate improved water delivery;
- developing standards for district operation;
- facilitating watermaster and hydrographer training through publications and live sessions;
- providing routine water, ground water, and water measurement district support by mailing notices, updating water user information databases, and assisting in delivery disputes.

Figures 5 and 6(pages 19 - 20) show the three (3) water districts that were modified during FY2014:

- Water District 37B (Camas Drainage; Figure 5) was created by merging two other water districts (37A Corral Creek and 37C Soldier Creek).
- Water District 37 (Big and Little Wood Rivers; Figure 5) was enlarged by incorporating Water District 37M (Silver Creek) and adding ground water rights to its jurisdiction.
- Water District 63 (Boise River; Figure 6) was expanded to include all of Boise River basin, specifically those upstream of Arrowrock Dam.

The modifications of these three water districts represent common reasons for ongoing adjustment of water distribution in Idaho. First, IDWR originally created most water districts to administer water rights partially decreed during an adjudication. Many of the pre-existing water districts (prior to the SRBA) were created in smaller adjudications over the past 100+ years. When the SRBA decrees were finalized, some of these early districts were modified or combined to meet current needs and gain economy of scale. Second, as Idaho's population has grown so has the demand for more resources. Creating or modifying a water district ensures a watermaster will administer the adjudicated water rights.

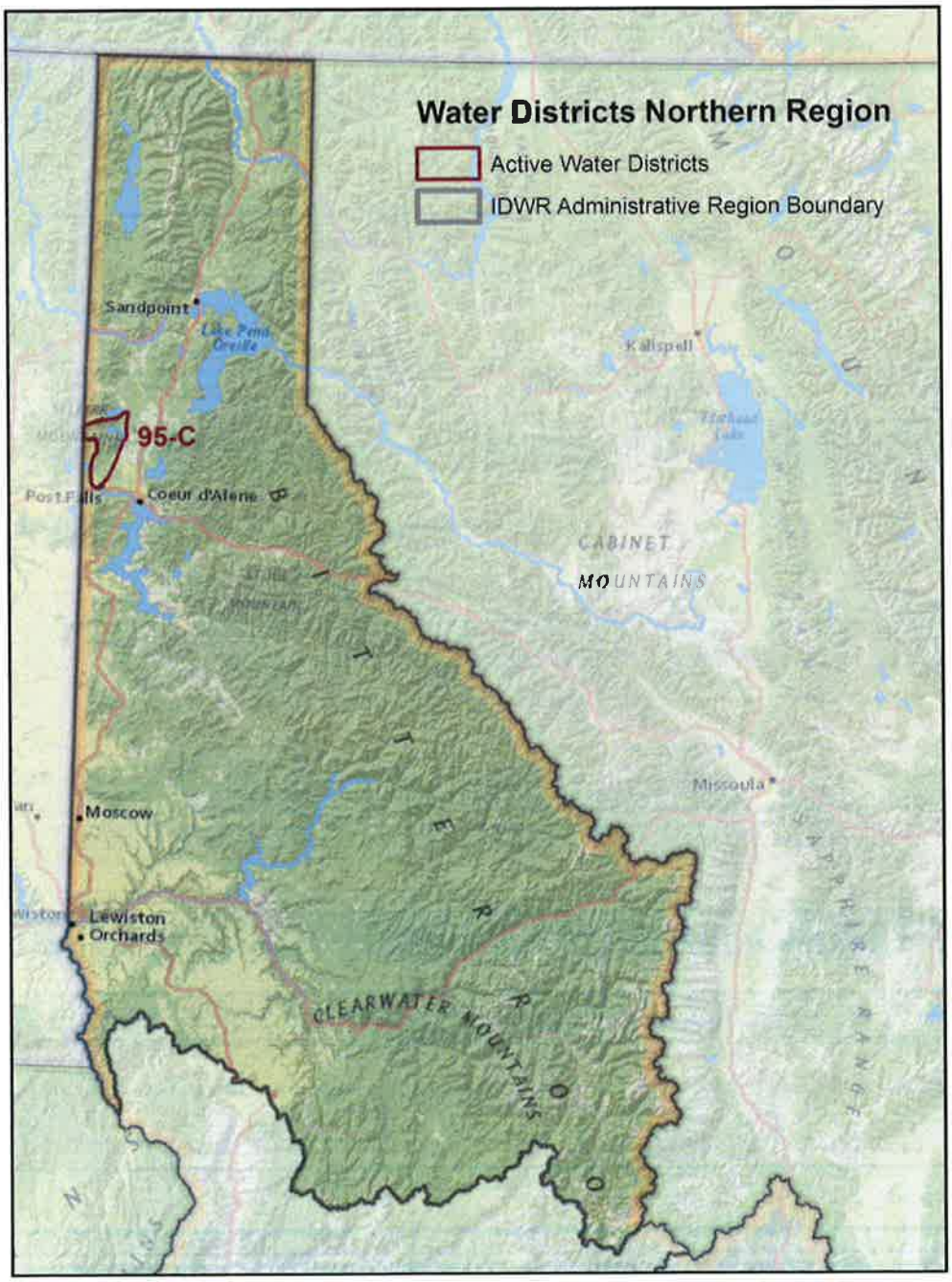


Figure 3: Active Water Districts in IDWR Northern Region, FY2014

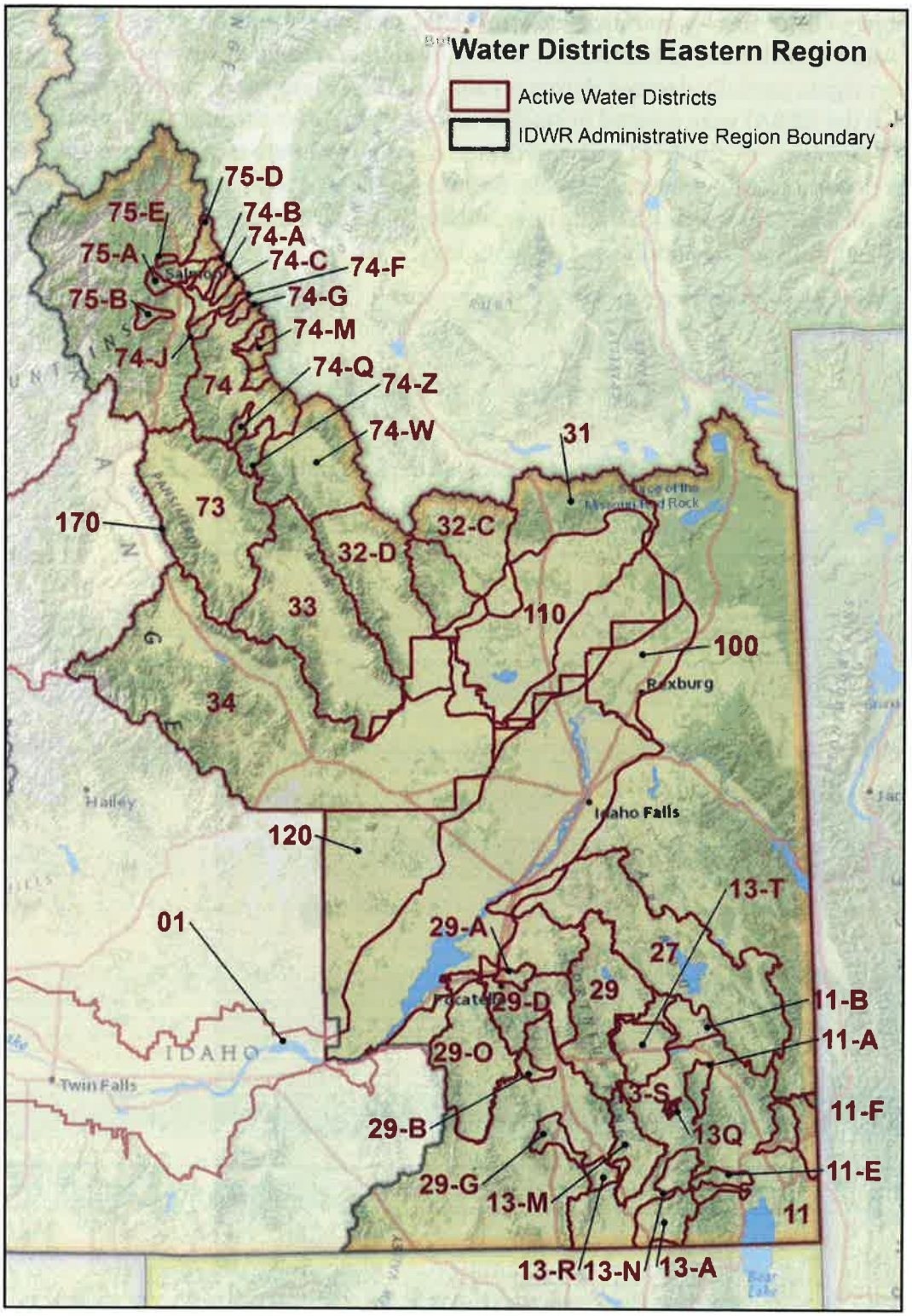


Figure 4: Active Water Districts in IDWR Eastern Region, FY2014

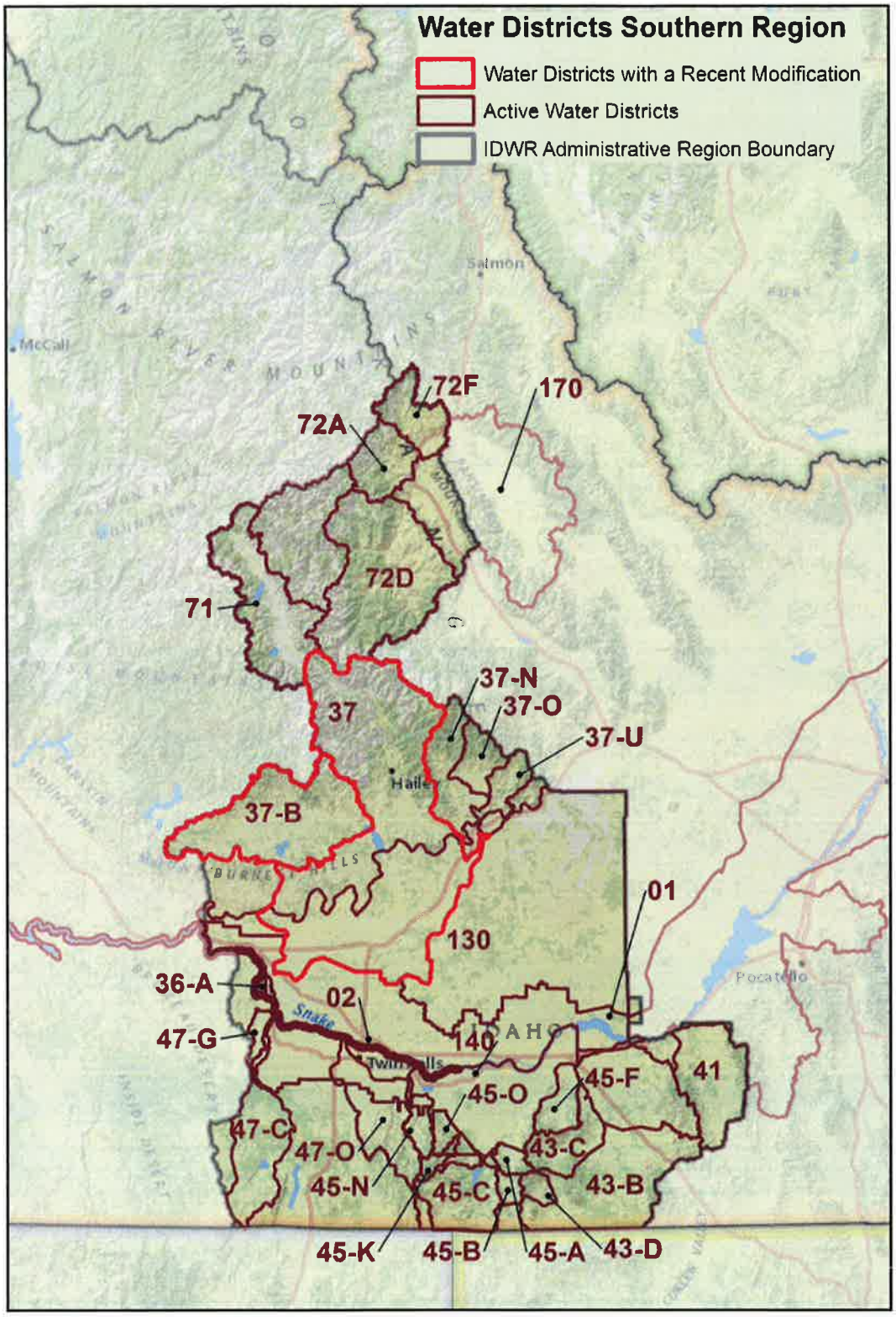


Figure 5: Active Water Districts in IDWR Southern Region, FY2014

Figure 6: Active Water Districts in IDWR Western Region, FY2014

Ground Water Protection Section

The Ground Water Protection Section regulates all aspects of well construction and well driller licensing in Idaho. The four programs within the Ground Protection Section—Well Construction Program, Underground Injection Control (UIC) Program, Geothermal Resources Program, and Driller Licensing Program—perform a range of activities, including:

- authorizing permits for new well construction;
- field-verifying proper well construction;
- archiving information about well construction, well location, and state-wide hydrogeology; and
- licensing well drillers.

Ground Water Protection Section staff is located at all regional offices and the state office. Regional staff supports the state office staff through administering well driller licensing exams, approving well drilling permits, and completing well construction inspections. All other tasks, including those within the UIC, Geothermal Resources, and Driller Licensing sections, are fulfilled by the state office.

Well Construction Program

The Well Construction Program supervises the construction, modification, and decommission of all non-geothermal wells, including domestic, commercial, municipal, industrial, and monitoring wells.

As Chart 21 depicts, the overall number of well construction permits issued (both new construction and modification of existing wells) has increased over the past several years, after a drop during the slow housing economy. The steady growth in new home construction over the past several years has contributed to this increase.

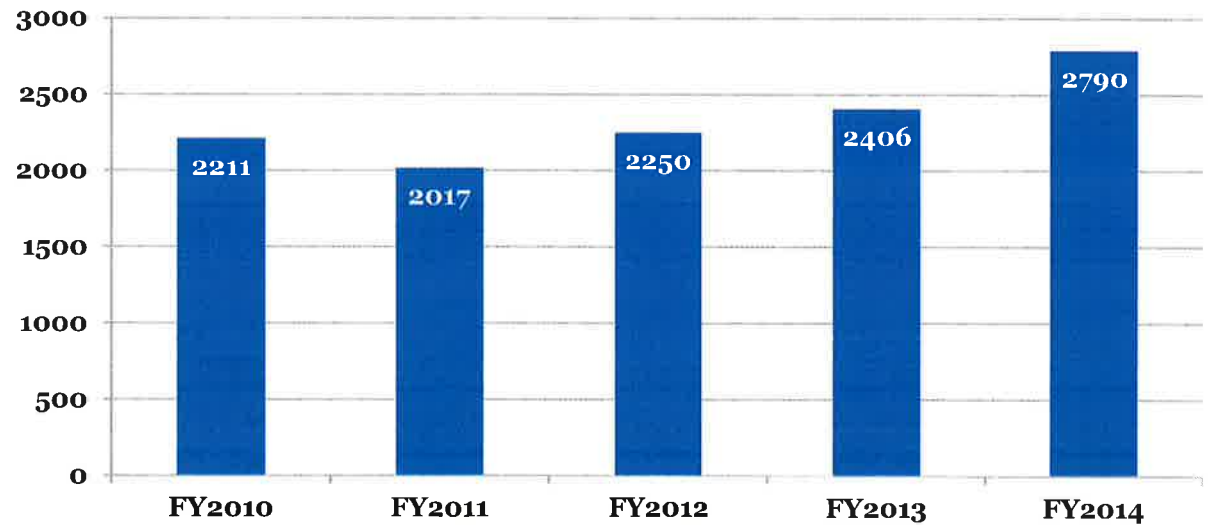


Chart 21: Total Number of Well Permits Issued FY2010–FY2014

Underground Injection Control Program

The Underground Injection Control (UIC) program, delegated to IDWR by Environmental Protection Agency (EPA) in 1985, regulates the construction, operation, and abandonment of all injection wells in Idaho. Injection wells are used as a means to dispose of or store underground excess stormwater, agricultural water, and facility heating/cooling water underground. Currently, IDWR has over 17,000 injection wells on record. Nearly 16,000 are shallow wells (< 18 feet deep) and the remaining are deep wells (≥ 18 feet deep).

During FY2014, UIC staff approved 408 new or renewed injection well applications. Before approving construction, modification, or continued use of any injection well, UIC staff reviews the applications, conducts field visits (if necessary), and informs the local public of the project.

In addition to managing the daily activities of the program, the UIC staff followed up on last year's approved statutory revisions with revising the reinforcing regulations in an effort to make the rule match the statute. The revised rules were adopted by the Idaho Legislature in the 2014 session.

A challenge facing the UIC program is the reduction of staff from two FTEs to one FTE and the subsequent decision by IDWR to indefinitely delay refilling the lost FTE. Although the duties of the UIC program required by statute will continue to be performed by the remaining FTE, a re-prioritization of tasks had to occur with the recognition that efficiencies would be reduced to some degree.

Geothermal Resources Program

The Geothermal Resources Program regulates drilling, operation, maintenance, and abandonment (decommissioning) of all geothermal resource wells in Idaho, as outlined in Idaho Code §42-4001 - 4015. Geothermal wells are defined as any well having a bottom hole temperature of 212° F or greater (Idaho Code §42-4002). Therefore, the Geothermal Resources Program *does not* regulate the more common low-temperature geothermal wells used for heating purposes. Low-temperature geothermal wells have a bottom hole temperature greater than 85° F and lower than 212° F and are regulated by the IDWR Well Construction Program.

Upon receipt of the permit application, program staff reviews the application and conducts a thorough technical evaluation before drilling can commence.

	FY2010	FY2011	FY2012	FY2013	FY2014
Geothermal Well Applications Processed	10	4	2	4	6

Table 2: Geothermal Well Applications Processed FY2010–FY2014

Due to the infrequency of geothermal well projects, only one Ground Water Protection Section staff member is tasked with reviewing and approving the applications. However, this minimal staff creates the largest challenge faced by the Geothermal Resources Program: digitally archiving the large and numerous documents of both recent and historical projects.

Driller Licensing Program

The IDWR Driller Licensing Program regulates the licensing of well drillers per IDAPA 37.03.10, which establishes the requirements and procedures for obtaining and renewing authorization to drill wells. The Driller Licensing Program staff fulfills this responsibility by:

- reviewing and processing licensing applications,
- organizing and presenting required continuing education seminars,
- coordinating the annual license renewal of hundreds of well drillers, and
- data entering and maintaining individual driller and drilling company information.

Total driller licenses issued have fluctuated in recent years, although increasing overall (

Table 3). This fluctuation reflects the changing demand for domestic wells during the recent housing and economic downturn. The program has kept up with recent demand by producing modern database software that automates certain aspects of the licensing process. The new software was designed to be more user-friendly and intuitive, allowing new or non-driller licensing staff to enter and process applications.

	FY2010	FY2011	FY2012	FY2013	FY2014
Total Driller and Operator Licenses Issued	149	183	128	214	173

Table 3: Driller and Operator Licenses Issued FY2010–FY2014

The main challenge for Driller Licensing staff is the delay incurred by incomplete applications. Staff must contact each driller and wait for the missing information. Occasionally, additional follow up with the individual drillers, drilling companies, and/or IDWR regional offices is required. The license is processed and issued later than intended, potentially taking time and energy away from other projects. Although Idaho Code does not set a processing deadline, program staff attempts to process all complete applications within 14 days of receipt.

Enforcement Unit

The Enforcement Unit and the unit Program Coordinator, working with state and regional office staff, address and resolve water use violations in all IDWR regulatory programs state-wide: well construction, well driller licensing, stream alteration, recreational mining, underground injection control, safety of dams, and water appropriation. Necessary enforcement activities are coordinated with or initiated by the enforcement unit, such as addressing complaints, conducting investigations, issuing notices of violation, and conducting compliance conferences to resolve violations. This unit was added to the IDWR Water Compliance Bureau to ensure consistency in agency policies for regulatory activities prescribed by State Law.

Enforcement of the statutes and rules during FY2014 increased nearly twofold from the previous year, from 9 cases to 16.

The unit's administrative enforcement activities are conducted pursuant to Idaho Code §42-1701B. The unit is obligated to understand, administer, and enforce the statutes and rules that govern individual IDWR regulatory programs.

Enforcement of the statutes and rules during FY2014 increased nearly twofold from the previous year, from 9 cases to 16. Part of this success is due to the recent creation of an Enforcement database software application which is accessible to IDWR employees state-wide. The database allows staff to track the progress and status of each case and view related digitized documents, ensuring each case is resolved in a timely manner.

Stream Channel Protection Unit

The IDWR Stream Channel Protection Unit evaluates potential alterations to stream channels for the protection of fish and wildlife habitat, aquatic life, recreation, aesthetic beauty, and water quality. Using Idaho Code §42-3801 and the Idaho Stream Channel Protection Act requirements, the Stream Channel Protection Unit approves or denies projects involving any work being done inside the ordinary high-water mark (generally, the streambed and stream bank) of a continuously flowing stream.

Stream Channel Protection permits are issued for two different types of applications: Joint Application for Stream Channel Alteration Permits (Joint Applications) and Letter Permit for Recreational Mining (Letter Permit).

Stream Channel Protection Unit support staff serves at the Northern, Eastern, and Southern regional offices. The Stream Channel Protection Unit Coordinator serves at the state office and oversees the regional office staff while also completing the daily functions for the state and western region units.

Joint Application for Stream Channel Alteration Permits

The Joint Application permit form and process was developed in conjunction with the Idaho Department of Lands (IDOL) and the US Army Corps of Engineers (USACE) because these agencies also have jurisdictional permitting programs related to the protection of streams and wetlands. The Joint Application allows the applicant to fill out and submit one application to each agency for subsequent approval(s). Upon receipt of a complete Joint Application, the Stream Channel Protection Unit issues a permit within 60-90 days (the timeline varies depending on the complexity of the project and the number of parties affected by the project).

Table 4 (page 23) shows the number of Joint Applications IDWR received in FYs 2010 through 2014. Some Joint Applications received very late in FY2014 will count as being received but were not reviewed, processed, or permitted before the end of the fiscal year period.

	FY2010	FY2011	FY2012	FY2013	FY2014
Joint Applications Received/Processed	182	183	282	244	263
Permits Issued	131	149	200	176	190

Table 4: Joint Application Data FY2010–FY2014

The Stream Channel Protection Unit strives to maintain the ideal 60-day processing timeline. However, most applications take longer, as the two-and-a-half FTE positions attempt to keep up with the data entry, correspondence, review, field exams, and permitting for each application. A new, more efficient database system will help alleviate some time and effort. The creation of the new database is currently suspended, however, due to limited IDWR programming resources.

Letter Permit for Recreational Mining

The Stream Channel Protection Act regulates the use of recreational mining equipment. Miners are required to obtain a Letter Permit for Recreational Mining (Letter Permit) from IDWR before altering any portion of the streambed. Recreational mining equipment is any implement used to dig, scrape, dredge, or otherwise move stream bed materials from below the ordinary high watermark (streambed or stream bank) in search of minerals.

Completed and signed letter permits are considered authorized by IDWR upon receipt of the permit and fee. By signing the letter permit, the applicant indicates he/she has read and understands the *Recreational Mining Stream Channel Alteration* instruction booklet and will conduct operations in compliance with the stated instructions and rules.

Letter Permit submittals had increased over the past several years, with a record 911 permits submitted in FY2013. However, Letter Permit submittals dropped significantly during FY2014 to 473. IDWR has not changed the permitting process, so it is difficult to pinpoint the reason behind this decrease. Potentially, the decline could be due to the Environmental Protection Agency (EPA) also requiring a permit for recreational dredgers (as of 2013).

Whatever number of recreational dredging letter permits IDWR receives, the Stream Channel unit is better prepared to record the information with new database software. The new software tracks the letter permits and allows quick data searches, whether for one or hundreds of permits.

Floodplain Management Unit

The Floodplain Management Unit, headed by the State Floodplain Coordinator, administers the National Flood Insurance Program (NFIP) in Idaho via the CAP-SSSE program grant through FEMA (implemented via executive order by Governor Butch Otter in June 2011). Currently, 175 communities participate in the NFIP. In 2014, 22 communities adopted standards beyond the basic NFIP requirements and became enrolled in the Community Rating System (CRS).

The Floodplain Management Unit, through the CAP-SSSE program, is designed to help Idaho communities and citizens by

- ensuring the flood loss reduction goals of the NFIP are met,
- building state and community floodplain management expertise and capability, and
- leveraging state knowledge and expertise in working with communities.

The primary priority of the unit was to not only close prior Community Assistance Visits (CAV) but to open new ones. Six community assistance visits/contacts were successfully closed, while three new assistance visits have been opened and are underway. Per the CAP-SSSE, 40% of the duties of the State Floodplain Coordinator are specially designated for CAV work.

A review of local floodplain ordinances was also implemented, aimed to address possible shortfalls within local standards and encourage communities to adopt floodplain ordinances. Current standards and ordinances promote reduced risks to new development in the SFHA and reduce homeowners' flood insurance rates by implementing higher standards.

The IDWR Floodplain Management Unit helped fulfill these goals by hosting floodplain related workshops throughout the State (Boise, Lewiston, Hailey, Garden City, and Challis) to increase awareness and provide knowledge to local floodplain administrators, decision makers, insurance agents, and the local public. Attendance at these workshops ranged from 50-100 attendees. Co-presenters were typically other government agencies and local experts to assist with presenting information on pre-disaster mitigation, building codes, public-private partnerships, levee updates, and community preparedness. Attendees left with resources, strategies, and a better understanding of how to increase resiliency in the event of future flooding.

The Floodplain Management Unit hosted floodplain-related workshops throughout the State... increasing awareness and providing knowledge to floodplain administrators, local government, insurance agents, and the general public.

Technical Services Bureau

The Technical Services Bureau supports initiatives throughout IDWR and is divided into two sections: the Geospatial Technology Section and the Hydrology Section. Although Technical Services Bureau staff support various IDWR programs statewide, all but one of the Bureau employees work out of the state office.

Geospatial Technology Section

Idaho Code §39-120 designates IDWR as the state's leader for natural resource geographic information systems (GIS). The Geospatial Technology Section, using GIS software, provides expertise, applications, data, and analyses to evaluate well drilling applications, water right applications, compliance issues, and to refine and improve ground water modeling. This data is used by IDWR staff, the attorney general's office, state and local governments, and the general public to analyze and assess water rights, the water supply bank, IDWR administrative boundaries, well locations, proposed recharge sites, and monitoring locations. The section also provides web-based tools and applications that are used by IDWR staff and the public via the IDWR website.

IDWR's Geospatial Technology Section (is) the state's leader for natural resource geographic information systems.

Besides supporting business practices throughout IDWR, the Geospatial Technology Section is also specifically tasked with maintaining the repository of ground water quality data for the state of Idaho, called the Environmental Data Management System (EDMS). EDMS is set up to facilitate cooperative ground water programs among multiple state agencies. GIS staff also provides tools for the public to access this data.

Because of various entities' reliance upon the section's accuracy of information, most major projects of FY2014 encompassed improving applications and databases.

Hydrologic Database Integration: The hydrologic database is used by the hydrologists and many other members of IDWR to assist with water rights, planning, modeling, and other efforts. Data from several independent databases was integrated into the existing hydrologic database. With this improvement, the section can now easily and efficiently share once-scattered information with IDWR staff, the public, and other agencies.

Interactive Map Improvements: The IDWR website provides various interactive maps to the public and other agencies. These maps provide information regarding well drilling, state-protected streams, evapotranspiration, flood hazard, and general mapping tools. Updating these online tools with new software and enhanced features allow the public to retrieve, print or query accurate and detailed data.

GIS Toolbar Improvements: WREdit is the GIS toolbar used throughout IDWR for specific business practices. During FY2014, enhancements were added for the hydrologic database, including geothermal, groundwater quality monitoring, and planning model sites. These tools reduced application processing time and assisted in efficient data discovery.

Hydrology Section

The Hydrology Section provides hydrologic data collection, quantitative data analyses, and technical support services for the administration, management, planning, and protection of the state's water resources. Section hydrologists account for the delivery of reservoir storage and natural stream flow according to Idaho's water right priority system. Staff develop and operate ground water models of major aquifers within the state, and maintain and operate a river and reservoir system operations model of the Snake River for planning purposes. The data, models, and programs are used for predicting water supply for the upcoming irrigation season, planning for improved utilization of water resources, and quantifying the effects of drought, recharge, and pumping on aquifer water levels and river flows. These studies and modeling efforts are often a part of a collaborative process that is important to private industry, agricultural interests, numerous organizations, other government agencies, and IDWR in developing an understanding of Idaho hydrology of Idaho.

The (hydrologic) data, models, and programs are used for predicting water supply for the upcoming irrigation season, planning for improved utilization of water resources, and quantifying the effects of drought, recharge, and pumping on aquifer water levels and river flows.

An important and ongoing project for both state and regional office staff is the data collection program, which last year involved monitoring at more than 1,300 sites statewide:

- Statewide Water Quality Monitoring Program (271),
- Geothermal well monitoring (39),
- Managed recharge (38),
- Aquifer water level monitoring (785), and
- Stream, spring, and agricultural return-flow monitoring (195).

In addition to data collection, the Hydrology staff accomplished other important goals.

Wood River Valley Aquifer Model: Significant progress was made toward development of an aquifer model for the Wood River Valley. The model is being developed collaboratively by IDWR and the United States Geological Survey under the guidance of a Technical Advisory Committee. The model will be used to facilitate water resource planning and conjunctive administration and is scheduled for rollout at the end of 2015.

Snake River Flow Measurement at Murphy Gage: In collaboration with stakeholder representatives comprising the Swan Falls Technical Working Group, hydrology staff developed

and documented a methodology for factoring out Idaho Power Company reservoir operations from measured flows in the Snake River at the Murphy gage. A computational method for doing so is required to enforce the provisions of the hydropower and minimum flow water rights that were decreed under the 1984 Swan Falls Agreement/Settlement.

Aquifer Recharge Program: Hydrology staff supported this program by assisting with recharge site characterization efforts and by applying the Enhanced Snake Plain Aquifer Model to quantitatively assess the performance potential of recharge sites in eastern Idaho.

Mountain Home AFB: Hydrology staff provided water use and hydrologic impact analyses in support of efforts to augment the water supply for Mountain Home Air Force Base.

Although daily tasks and many special projects were completed, several Hydrology Section initiatives were delayed. First, the development of water right accounting and water resource planning tools have been hindered by significant losses to IDWR's computer programming and database development staff. Secondly, resource limitations have also made it difficult to provide timely technical support in response to water delivery calls, water right transfers, and water right applications. These challenges also impede efforts to make progress on multiple aquifer model development and enhancement projects in support of conjunctive administration.

Idaho Water Resource Board

The Idaho Water Resource Board (IWRB or Board) is composed of eight members, each appointed by the governor for a four year term. Per Idaho Code §42-1732 – 1734, the IWRB creates and implements the state water plan, comprehensive basin planning, protected rivers designations, minimum stream flow programs, water project financing, and water supply bank leases and rentals.

Although the IWRB is not an official section of IDWR, the Director supports the IWRB as needed and assigns Planning and Projects Bureau and Technical Services Bureau staff to help carry out its duties. The IWRB and IDWR also collaborate on court appeals, administrative rules adoption, water bank administration, and water right negotiations with the Federal government and Indian Tribes.

In addition to its planning and designating authority, the IWRB also provides financial assistance for water development and conservation projects. The IWRB has two accounts, water management and revolving development, from which it makes loans and grants. A third account, the Aquifer Planning and Management Fund, was added by the Idaho Legislature in 2008 (Idaho Code § 42-1779). This fund was established for technical studies, facilitation services, hydrologic monitoring, measurement and Comprehensive Aquifer Planning and Management. The IWRB can also issue debt in the form of revenue bonds, where the proceeds are loaned to the entity requesting financial assistance. The loan repayments are the revenue used to repay the debt service on the bonds.

Table 5 below lists the projects authorized by the IWRB in FY2014. This does not reflect ongoing projects authorized prior to FY2014.

Project	IWRB Project Expenditure
Treasureton Irrigation Company and Franklin County Local Improvement Dist. No. 2010-2 (costs related to bond issuance)	$5,000
Rathdrum/Spokane Aquifer Technology Project	$20,000
Lower Lemhi 2014-2015 Water Right Subordination Agreements	$180,610
Pole Creek Water Transaction	$60,000
Evaluation of Alternative Ground-Water Pumping Schemes as an Approach to Mitigating Problems of Critical Low Flow in the Spokane River Technical Study	$70,000
South Liberty Irrigation Company and Bear Lake County Local Improvement Dist. No. 2010-1 (costs related to bond issuance)	$5,000
2014 Morgan Creek Water Transaction	$8,000
South Leigh Creek Water Transaction	$4,606
Aqua Life Aquaculture Facility	$1,635,000
Weiser Hydropower Integration Project	$55,000
2014 Bohannon Creek Water Transaction	$10,164
TOTAL	**$2,053,380**

Table 5: Projects and Expenditures Authorized by the IWRB FY2014

In 2014, the Idaho Legislature appropriated $15 million one-time funds and directed $5 million annually from the cigarette tax...to the IWRB to support a Water Sustainability and Aquifer Stabilization Initiative.

In 2014, the Idaho Legislature appropriated $15 million one-time funds and directed $5 million annually from the cigarette tax (first disbursement in July 2015) to the IWRB to support a Water Sustainability and Aquifer Stabilization Initiative. Several projects have been initiated to support these efforts in accordance with the funding package, as outlined in

Table 6.

Project	Amount
Mt. Home AFB Water Rights and Supply	$4 Million
ESPA Managed Recharge Infrastructure and Expenses	$4 Million
Northern Idaho Future Water Needs Studies	$500,000
Water Storage (Galloway, Arrowrock, Island Park)	$6 Million
Water Supply Bank Computer Infrastructure and Costs	$500,000
HB547 Aquifer Stabilization Funding	$5 Million Annually

Table 6: Projects Supporting Water Sustainability and Aquifer Stabilization Initiative FY2014

Planning and Projects Bureau

The Planning and Projects Bureau (Bureau) primarily supports IWRB programs, including the State Water Plan, water project development and funding, minimum stream flows, natural and recreational river designations, comprehensive basin and aquifer planning, and coordination of the Water Supply Bank.

The Planning and Projects Bureau is responsible for oversight and administration of large-scale initiatives on behalf of the IWRB such as the Water Resource Sustainability and Aquifer Stabilization Initiative and continued implementation of the Eastern Snake Plain Aquifer - Comprehensive Aquifer Management Plan (ESPA-CAMP). This includes expansion of managed recharge on the Eastern Snake Plain Aquifer, evaluating new water storage reservoirs throughout the state, and undertaking projects in the Upper Salmon River basin to provide flows needed for recovery of ESA-listed anadromous fish species, including alleviating water use conflicts between the needs of fish and irrigated agriculture. In general, this Bureau supports IWRB efforts to provide solutions to water use conflicts that may have severe statewide economic and natural resource impacts.

...the Planning and Projects Bureau supports IWRB efforts to provide solutions to water use conflicts that may have severe statewide economic and natural resource impacts.

The Planning and Projects Bureau accomplishes these over-arching goals through various on-going projects.

Water Project Financing: The IWRB Financial Program finances the construction of water projects that help develop state-wide water projects. This program fulfills two main objectives: 1) assists water users to keep water storage and delivery systems operating and in good working order, and 2) allows the IWRB to facilitate financing and acquisition of real property to provide solutions in the public interest.

State Water Plan: The State Water Plan, and component basin and aquifer plans, seeks to ensure that through cooperation, conservation, and good management, future conflicts will be minimized and the optimum use of the state's water resources will benefit the citizens of Idaho currently and in the future.

Water Storage Studies: The IWRB investigates potential storage projects to make the best use of available water supplies and provide maximum flexibility to manage and operate these resources.

Aquifer Stabilization Strategies: The ESPA-CAMP identified a number of strategies to promote aquifer stabilization including managed aquifer recharge, ground water to surface water conversions, demand reduction, cloud seeding, and continued monitoring and measurement. The IWRB supports all of these activities and endorses stakeholder partnerships to leverage resources, including federal funds. The IWRB is also pursuing opportunities to support aquifer stabilization efforts in other basins statewide.

Managed recharge continues to be a robust tool for ESPA-CAMP implementation and aquifer stabilization. Since 2008, the IWRB recharge program has resulted in an annual average of 74,000 acre-feet of recharge on the ESPA, which contributes to aquifer stabilization, resolving long-term water management conflicts, and meeting the State's obligations to maintain minimum flows at the Murphy Gage which are dependent on spring discharges from the ESPA.

Staff, in partnership with water users, completed an evaluation of a potential project at Lake Walcott through the use of test wells as well as pump and injection tests. The concept was to pump natural flow under the IWRB's recharge water right from Lake Walcott through a pipeline to a series of injection wells located on state lands. While the injection wells demonstrated reasonable intake rates, the project was deemed to be too costly to pursue at the present time.

Staff also performed a site test at an existing recharge location called Milepost 31 off the Milner-Gooding Canal. The test included an evaluation of impacts to the aquifer and demonstrated positive aquifer response to recharge at the site. Staff continues to pursue opportunities to increase annual recharge volume through increased system capacity and by capturing flows spilling past Milner during the non-irrigation season, including winter-time diversions.

Figure 8: Fall recharge at Mile Post 3, October 2013

New storage in Idaho will help meet current and future water demands, lessening the potential for water conflicts in the future. Progress has been made on the Weiser-Galloway Project to evaluate potential project size and benefits associated with different operating scenarios that include hydropower, additional water supply, regional economic development, flow augmentation for anadromous fish recovery, flood control, and recreation. The IWRB also continues to partner with the US Army Corps of Engineers on the Boise River Feasibility Study to evaluate raising Arrowrock Dam on the Boise River for flood control and water supply. Federal funding ($1 million) was identified in the President's budget to support completion of the study. Finally, an evaluation of additional storage in the Henry's Fork Basin was completed in partnership with the US Bureau of Reclamation. Results identified an enlargement of Island Park Reservoir as a promising projcct that could provide approximately 30,000 acre-feet of new storage for under $10 million in construction costs.

Figure 9: Aerial View of Island Park Dam
Photo courtesy of US Bureau of Reclamation

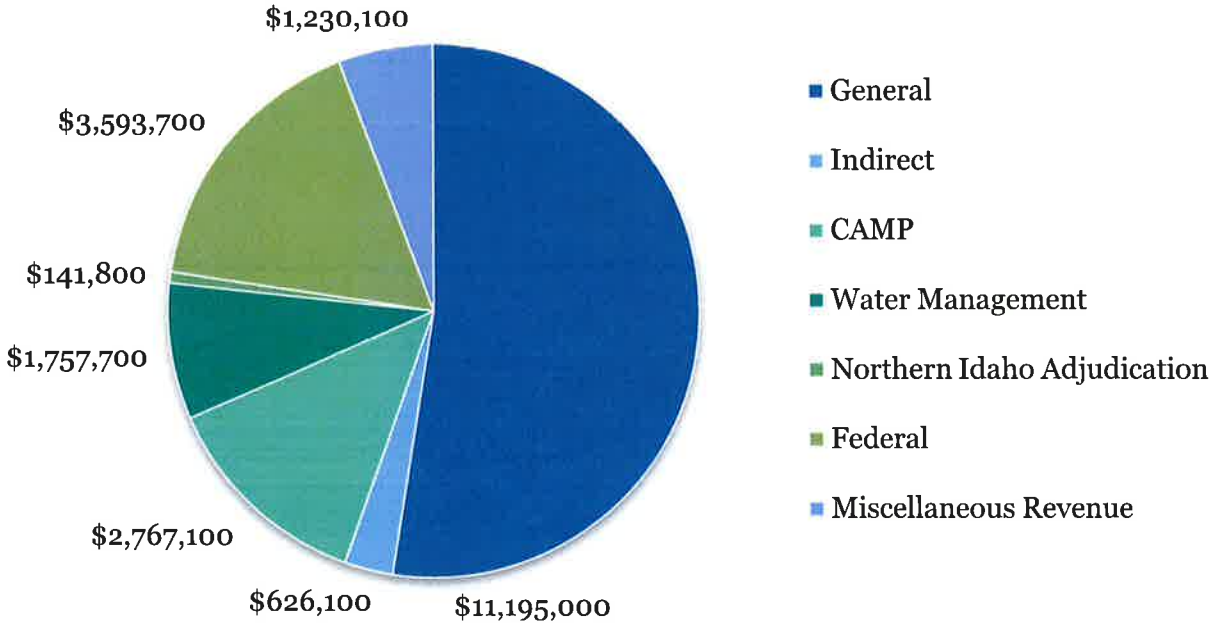
Statewide aquifer modeling, monitoring and measurements are also supported by the IWRB and IDWR staff. Efforts have been focused on the Eastern Snake Plain Aquifer Model, the Wood River Valley Ground Water Flow Model Project, the Treasure Valley Ground Water Model, and the Spokane Valley Rathdrum Prairie Model. Ongoing and expanded measurement efforts are used to support model development and calibration.

Through HB 479 and HB 547, the 2014 Legislature endorsed efforts to advance the above mentioned projects as well as efforts to ensure availability of water for future economic development in Northern Idaho (building on the findings of the Rathdrum Prairie Aquifer CAMP, July 2011) and to secure reliable water supplies for the Mountain Home Air Force Base, a significant contributor to the state's economy.

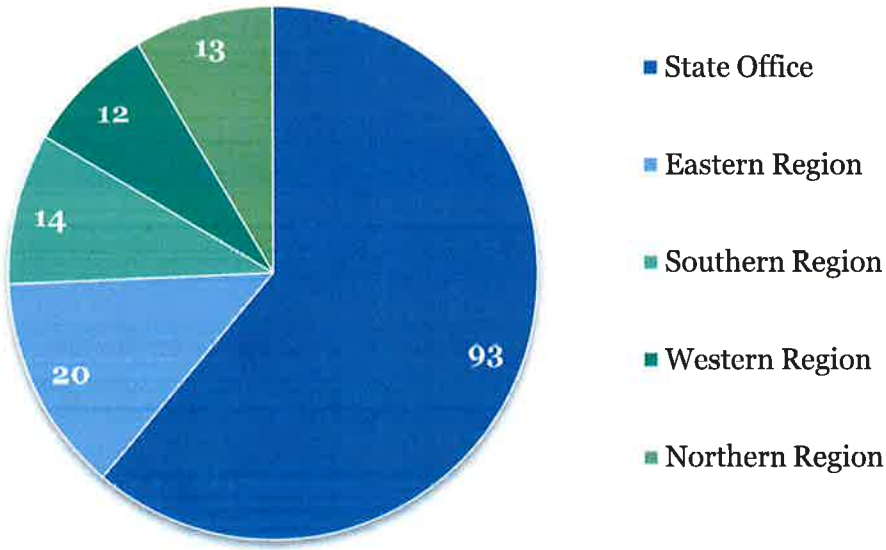
HB 547 directs $5 million annually to the Idaho Water Resource Board for statewide aquifer stabilization from the cigarette tax (first disbursement in July 2015) while HB 479 provides a one-time supplemental appropriation in the amount of $15 million from the General Fund "to ensure water availability for existing uses and to provide water supplies for future economic development.

Financial

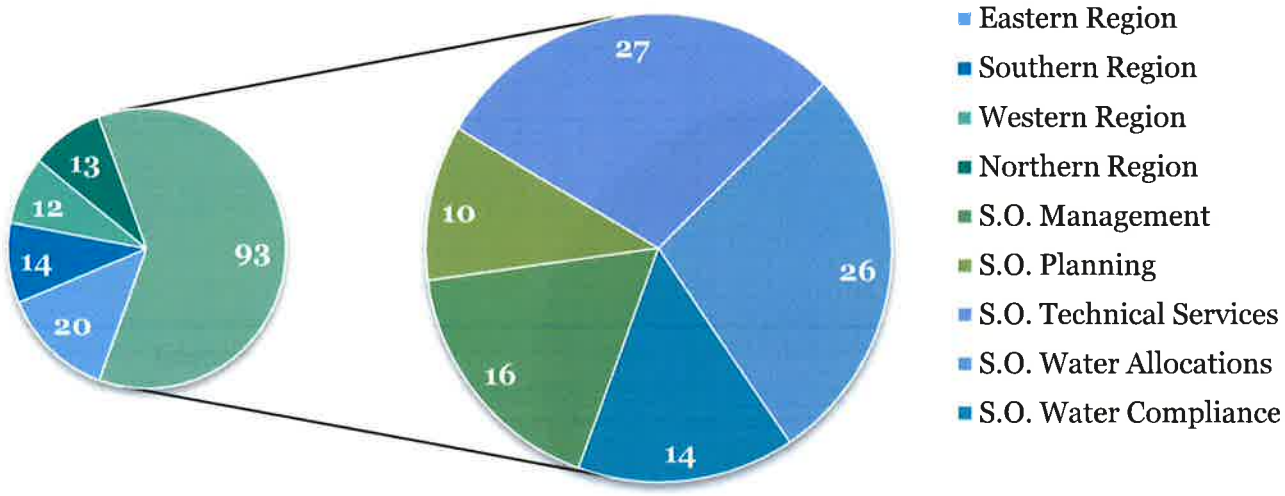
FY 2014 Agency Budget by Fund



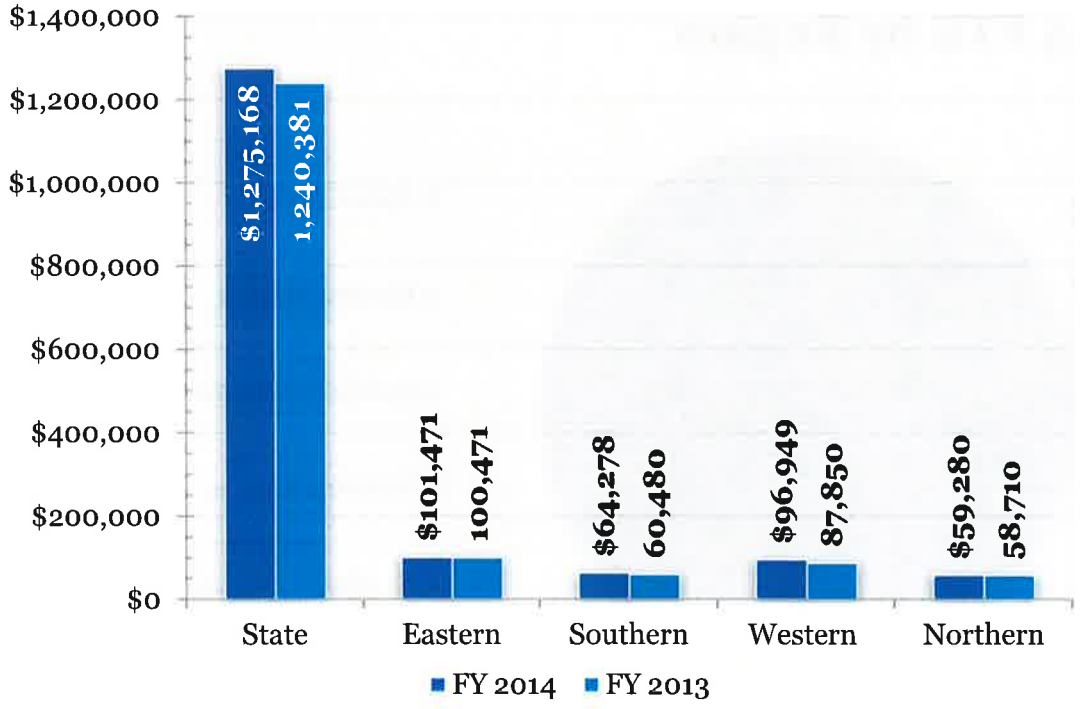
FY 2014 FTE by Region



FY 2014 FTE by Regional & State Office Bureaus



FY 2014 Annual Rent by Region



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