Oregon
Kate Brown, Governor

Water Resources Department
725 Summer St NE, Suite A
Salem, OR 97301
(503) 986-0900
Fax (503) 986-0904

MEMORANDUM

TO: Water Resources Commission

FROM: Ivan Gall, Field Services Administrator

SUBJECT: Agenda Item L, August 18, 2017
Water Resources Commission Meeting

Update from Watermaster District 19 and Report on 2016 Field Regulation and Enforcement Activities

I. Issue Statement

During this informational agenda item, staff will report on the 2016 field regulation and enforcement activities and provide an overview of Watermaster District 19.

II. Background

A. Field and Enforcement Structure and Duties

Watermasters are responsible for distributing water according to the system of prior appropriation under Oregon Law. The Department has 21 watermasters housed in five regional offices and 16 satellite offices across the state. Attachment 1 lists Department watermasters and their locations.

In addition to watermasters, in 2016, there were six state-funded, full time regional assistant watermasters. Counties and the Bureau of Reclamation also funded 19 part-time and full-time positions, including 11 assistant watermasters, two hydrologic technicians, and six office assistants. The locally-funded positions are typically supported through county budgets, grants, or contracts.

Regional offices house staff such as well inspectors, hydrologic technicians, transfer specialists, and hydrologists. These actions support many of the recommended actions in the 2012 Integrated Water Resources Strategy (IWRS). Day-to-day functions carried out by field staff include:

- Surface and groundwater distribution and regulation
- Installation of surface water measuring devices (IWRS action 1B)
- Customer service and public outreach

- Stream gaging and measurements (IWRS action 1B)
- Implementing the Water Resources Commission's Strategic Measurement Plan (IWRS action 2B)
- Investigation and referral of formal enforcement activities
- Preparation of hydrographic records
- Dam safety inspections (IWRS action 7B)
- Well construction compliance and enforcement activities
- Field assistance to other Department sections, including the Water Resources Development Program (IWRS actions 10A, 10B, 10C, and 10E)
- Permit, leasing, and transfer application review and processing (IWRS action 11B)

Day-to-day field activities involve working with water users to ensure compliance with the terms and conditions of their water rights. When voluntary compliance in the field is unsuccessful, regulatory actions are subsequently referred to the Well Construction and Compliance Section Manager for formal enforcement action.

The Well Construction and Compliance Section Manager is responsible for developing enforcement policy for both surface and groundwater, carrying out formal enforcement actions, negotiating resolutions, and maintaining statewide program consistency. Formal enforcement is initiated by the issuance of a proposed order and may include consequences such as suspension of a well constructor's license or a proposed notice of assessment of civil penalties. Generally, by working with individuals, most formal enforcement actions are resolved before the case is referred to the Office of Administrative Hearings.

B. Workload Prioritization

Watermasters and field staff typically have more work than they can reasonably accomplish. To address this problem, the Department developed internal management directives to assist staff in setting priorities for enforcement actions. The directives have been used for several years and are an effective tool for prioritizing field work. The Commission's Strategic Measurement Plan also identifies priority watersheds for work activities, such as significant points of diversions.

Field staff's goal is to proactively engage in water management rather than relying solely on a complaint-driven process. The directives highlight the effectiveness of education and communication in preventing water law violations before they occur. Water users are more likely to voluntarily comply when they are knowledgeable about their rights and responsibilities, and when users and field staff know what to expect from each other. When not responding to complaints, known violations, and other high priority assignments, staff can engage in public education activities.

C. Process and Approach to Surface Water Regulation

Generally, water is distributed according to priority date, regardless of the type of beneficial uses involved. The oldest rights get the water first unless the right is specifically subordinated to junior users. The type of use becomes important only when conflicting uses have the same

priority date. In this case, a domestic use would have preference to all others, and an agricultural use would have preference to a manufacturing use (ORS 540.140).

Watermasters do not begin regulation until the amount of streamflow has been measured and legal rights of the users are known. If streamflow is not adequate to satisfy an instream water right, or if a call is made by a senior water user, the watermaster begins an investigation and then takes appropriate actions such as curtailing or shutting off the diversions of junior users. Only in unusual cases, when voluntary compliance with the watermaster's request is not achieved, do formal phases of enforcement begin.

On stream systems where annual regulation occurs, watermasters prepare distribution maps showing the location of the rights, priority date, and other necessary information. This may involve several hours or days of effort, depending on the number of water rights in the stream basin. In some districts, the watermaster has a local database of water right information and is able to generate "distribution letters" requesting that junior users curtail their diversions. The department's Information Services staff are working to automate the creation of distribution letters for the entire state, using water right and tax lot information.

Unauthorized uses of water discovered during surface water regulation are addressed first. In addition to uses without a water right, illegal uses include exceeding the limit of the right or violating a condition of the right, such as an unauthorized point of diversion or excessive diversion rate. If eliminating illegal use does not provide the water to satisfy senior water rights, the watermaster will require junior right holders to reduce or discontinue their use until this goal is met. If no junior rights exist, or if these actions do not provide the necessary additional water, the watermaster will advise the affected senior user.

During regulation, watermasters often negotiate voluntary reductions, rotations, or compliance schedules with water users. Senior right holders may volunteer to use less than their entitlement so that junior users are not completely shut off. In a rotation, groups of users agree to pool their rights so each participant may receive the amount of water "...to which they are collectively entitled" (OAR 690-250-0080). The available surface water is shifted to each user in the rotation in time proportional to each user's fraction of the collective water rights.

The most critical element to ensure regulatory success is the trust users have in the watermasters knowledge, consistency, and integrity. When a high level of trust is attained, the amount of time spent by the watermaster on a particular stream is minimized, and voluntary compliance tends to be the norm. Where the watermaster is involved annually in regulating a particular stream system, both the watermaster and the users are well aware of existing water rights and generally know what to expect from each other.

III. Discussion

A. 2016 Surface Water Regulation

The Department's definition of a regulatory action is "any action that causes a change in use or maintenance, or a field inspection that confirms that no change is needed to comply with the

water right, statute or order of the Department." Watermasters reported a total of 18,281 regulatory actions in 2016, compared to 20,336 in 2015. Of these 18,281 regulatory actions, 4,508 involved written notices. There is a large variation in total regulatory actions among the regions. For example, the efforts range from one action per stream to a high of 1,379 actions on the Umatilla River, tributary to the Columbia River. Differences can be attributed to the number of irrigation districts compared to the number of individual users; the number of water management arrangements such as rotation agreements, exchanges of water, or stored water deliveries; the length of the regulation season; water availability; and the number of points of diversion; and the priority dates of any in-stream water rights. Additionally, there are annual variations in the regulatory actions performed each year that are influenced by weather and staff resources.

In 2016, watermasters and their assistants regulated 431 stream systems, down from 586 in 2015. Multiple regulatory actions may occur on any one stream. Regulation was prompted by the watermaster's own investigation in 420 cases and by complaints in 238 cases. In many cases regulatory actions occur multiple times on a given stream, which is reflected by 18,281 regulatory actions that occurred on 431 individual streams. The number of regulatory actions and the number of streams regulated was lower in 2016 than in 2015, largely due to an improvement in water conditions throughout the state. Generally speaking, many of the same streams are regulated every year. The difference is how early regulation begins based on water conditions in that area, and to which priority date a stream is regulated. Attachment 2 provides a summary of field staff actions.

Department staff are currently working on a new database to better collect this data. One of the goals is to make sure that we are tracking when we take a regulatory action for an in-stream right, and if that right is being met or not.

In 2016, statewide, water user compliance with water rights and regulations was approximately 97.6 percent which is consistent with the 2015 compliance rate. This statistic indicates that at the points of diversion and water rights that field staff inspected or visited, the water user was in compliance or voluntary compliance was achieved 97.6 percent of the time. Attachment 3 provides a regional and watermaster district breakdown of 2016 compliance rates.

B. 2016 Well Program Activity

Regulation of well construction may be initiated in several ways, sometimes by complaints or inquiries from the public, or through an investigation by the well inspector or watermaster. Generally, the process begins with receipt of a "Notice of Beginning of Well Construction" also known as a "Start Card." After the start card is received by the Department, the well inspector or watermaster may make a site visit. Well inspectors work closely with drillers to informally resolve problems to protect groundwater and users.

Well reports, or "logs," are a physical description of well construction, alteration, abandonment, conversion, or deepening. In 2016, the Department received reports for 1,142 monitoring wells, 3,513 water supply wells, and 5,898 geotechnical holes. A geotechnical hole is a cased or

uncased, permanent or temporary (less than 72 hours) "hole" constructed for the purpose of evaluating subsurface information.

In 2016, the Department received 3,058 start cards for new wells (392 monitoring wells and 2,666 water supply wells). The regional well inspectors and field staff performed a total of 1,403 well inspections. Well inspections involve either on-site presence during well construction or review of the well shortly after it is drilled. Of the total inspections, 1,130 were conducted on new construction, representing an inspection rate of 37 percent of all new wells. Thirty six percent of new water wells were inspected, and 44 percent of new monitoring wells were inspected. About 11 percent of the new wells inspected were deficient. The deficiencies were predominantly minor and were most often resolved voluntarily by the well constructor. Attachment 4 summarizes the Well Construction Program Data for 2016.

C. Formal Enforcement Activity

Many of the Department's regulatory actions are resolved voluntarily upon notice to the responsible party. If compliance is not achieved at this level the watermaster may issue a Notice of Violation. This written notice specifies the nature of the violation, time frames within which compliance is expected, and the consequences for failure to comply voluntarily.

If compliance is not achieved following the Notice of Violation, the matter is referred through the Region Manager to the Well Construction and Compliance Section Manager for a formal enforcement action. If the Department determines there is sufficient evidence to pursue the matter, a proposed order is issued, which may include assessment of civil penalties. The violator has a specific period to request a contested case hearing. If no hearing is requested, a final order is issued and enforced.

At any point in the enforcement process, the responsible party may choose voluntary compliance. Of the 18,281 regulatory actions taken in 2016, only 15 Notices of Violation were issued by field staff, indicating that a high degree of compliance continues to be achieved voluntarily.

D. Water Measurement and Monitoring

Measuring devices help staff with streamflow monitoring and more accurate and efficient distribution of water.

The Water Resources Commission adopted a Strategic Measurement Plan in 2000, which was updated in 2007. This resulted in watermasters and assistant watermasters prioritizing measuring device installation on surface water significant points of diversions (SIGPOD)[1] in high priority stream basins.

[1] A SIGPOD diverts greater than five cubic feet per second (cfs), or greater than 10 percent of the lowest monthly 50 percent exceedance flow and greater than 0.25 cfs (essentially, a rate that would be considered large relative to the low flow of the stream), or has a condition on the water right requiring installation of a measuring device.

In 2016, staff worked with water users to have measuring devices installed and confirmed installation on 42 SIGPODs in high priority watersheds around the state. This compares to 71 significant diversions with measuring device installations confirmed in 2015. Attachment 5 provides a summary of SIGPOD work completed through the end of calendar year 2016 and a summary of the last five years of activity. The Department has a modest cost-share program to assist landowners with the installation of measuring devices.

Working closely with the Hydrographics Section, field staff installed 5 new gaging stations at locations that were not previously gaged. In addition, numerous existing stations were upgraded with modern equipment that provides staff better access to data through near real-time equipment. Whenever the Department abandons a stilling well, installs a new gaging station, or has an observation well installed it conducts an archeological review to protect cultural resources. The Department's ability to install and operate new stations is limited by current staffing levels in both the Hydrographics Section and the Field Services Division.

IV. Conclusion

Maintaining a strong field presence is important to manage and distribute water in Oregon, and to obtain compliance with Oregon's water laws. Field staff seek first to obtain compliance voluntarily and through education; therefore, the need to conduct formal enforcement actions is often unnecessary. The Department attempts to maintain a clear, consistent, and fair posture on water law and well construction violations, which minimizes the number of formal enforcements and allows staff to be as efficient as possible in distributing water and obtaining compliance in the field.

Attachments:

1. List of Watermasters by District
2. 2015 Surface Water Summary Statewide Totals
3. 2015 Compliance Rate Summary by Watermaster District and Region
4. 2015 Well Construction and Inspection Summary
5. Significant Point of Diversion Summary Table

Ivan Gall
503-986-0847

Attachment 1

WATERMASTER LIST

DIST	COUNTIES	WATERMASTER	CONTACT	STATIONED
1	CLATSOP/TILLAMOOK/ LINCOLN/W. COLUMBIA	HENDRICKS, Nikki, WM	503-815-1967	TILLAMOOK
2	LANE/LINN	BLAKELY, Lanaya, WM	541-682-3620	EUGENE
3	HOOD RIVER/WASCO/ WESTERN SHERMAN	WOOD, Robert, WM	541-506-2650	THE DALLES
4	SE WHEELER/GRANT	JULSRUD, Eric, WM	541-575-0119	CANYON CITY
5	UMATILLA/MORROW	SILBERNAGEL, Greg, WM	541-278-5456 x 290	PENDLETON
6	UNION	HATTAN, Shad, WM	541-963-1031	La GRANDE
7	WALLOWA	BATES, David, WM	541-426-4464	ENTERPRISE
8	BAKER	LUSK, Rick, WM & Asst. RM	541-523-8224 x 31	BAKER CITY
9	MALHEUR	JACOBS, Ron, WM	541-473-5130	VALE
10	HARNEY	JOHNSON, J R, WM	541-573-2591	BURNS
11	JEFFERSON/CROOK/ DESCHUTES	GIFFIN, Jeremy, WM	541-306-6885	BEND
12	LAKE	MAYER, Brian, WM	541-947-6038	LAKEVIEW
13	JACKSON	HAYNES, Shavon, WM	541-774-6880	MEDFORD
14	JOSEPHINE	SMITH, Kathy, WM	541-479-2401	GRANTS PASS
15	DOUGLAS	DOUTHIT, Susan, WM	541-440-4255	ROSEBURG
16	MARION/POLK/BENTON/ YAMHILL/S. CLACKAMAS	PLAHN, Joel, WM	503-986-0889	SALEM
17	KLAMATH	MARTIN, Tyler, WM	541-883-4182 x 223	KLAMATH FALLS
18	WASHINGTON/ EASTERN COLUMBIA	CONSTANS, Jake, WM	503-846-7780	HILLSBORO
19	CURRY/COOS	WACKER, Greg, WM	541-298-6157	COQUILLE
20	MULTNOMAH/ N. CLACKAMAS	KIM, Amy, WM	503-722-1410	CLACKAMAS
21	WHEELER/GILLIAM/ WESTERN MORROW/ EASTERN SHERMAN	THIEMANN, Ken, WM	541-384-4207	CONDON

Attachment 2

2016 SURFACE WATER SUMMARY REPORT TOTALS STATEWIDE

Streams Regulated	431
Regulatory Actions	18,281
Written Regulatory Actions	4,508
Other Than Written Regulatory Actions	13,773
Watermaster Investigation	420
Complaints	238

****

REASONS FOR REGULATORY ACTION- HIGHEST TO LOWEST

Protect Instream Rights
Protect Senior Out-of-Stream Rights
Protect Instream Rights & Senior Out-of-Stream Rights
Illegal Use
Protect Instream Rights & Shut-Off Illegal Use
Protect Senior Out-of-Stream & IS Rights & Shut-Off Illegal Use
Protect Senior Out-of-Stream Rights & Regulate Off Illegal Use

2016 SURFACE WATER SUMMARY

PERCENT IN COMPLIANCE BY DISTRICT

District	Year	Percentage	Year	Percentage	Year	Percentage	Year	Percentage
1	2013	96.0%	2014	99.0%	2015	99.0%	2016	99.6%
2	2013	89.9%	2014	93.1%	2015	90.6 %	2016	92.3%
3	2013	100.0%	2014	100.0%	2015	100.0%	2016	100.0%
4	2013	81.0%	2014	92.6%	2015	95.0%	2016	89.1%
5	2013	99.9%	2014	99.9%	2015	99.9%	2016	100.0%
6	2013	99.1%	2014	99.1%	2015	99.5%	2016	100.0%
7	No Previous Year				2015	100.0%	2016	88.4%
8	2013	100.0%	2014	100.0%	2015	99.9%	2016	100.0%
9	2013	100.0%	2014	100.0%	2015	100.0%	2016	100.0%
10	2013	100.0%	2014	100.0%	2015	81.1%	2016	97.4%
11	2013	90.9%	2014	92.0%	2015	92.0%	2016	95.1%
12	2013	99.9%	2014	99.3%	2015	88.6%	2016	100.0%
13	2013	99.2%	2014	100.0%	2015	100.0%	2016	99.7%
14	2013	64.4%	2014	91.9%	2015	95.0%	2016	97.3%
15	2013	99.4%	2014	100.0%	2015	99.9%	2016	100.0%
16	2013	96.7%	2014	99.5%	2015	98.0%	2016	98.7%
17	2013	98.6%	2014	98.0%	2015	99.6%	2016	100.0%
18	2013	100.0%	2014	100.0%	2015	97.7%	2016	97.0%
19	2013	82.9%	2014	90.9%	2015	94.0%	2016	97.6%
20	2013	98.4%	2014	100.0%	2015	99.7%	2016	98.1%
21	2013	78.6%	2014	95.8%	2015	100.0%	2016	98.5%

PERCENT IN COMPLIANCE BY REGION

Region	Year	Percentage	Year	Percentage	Year	Percentage	Year	Percentage
East	2013	99.7%	2014	99.9%	2015	99.5%	2016	99.6%
North Central	2013	99.3%	2014	99.9%	2015	99.3%	2016	99.0%
North West	2013	96.7%	2014	98.5%	2015	97.6%	2016	98.3%
South Central	2013	96.6%	2014	99.4%	2015	94.3%	2016	97.4%
South West	2013	88.4%	2014	99.2%	2015	99.2%	2016	99.3%

2016 WELL CONSTRUCTION AND INSPECTION INFORMATION

Start Cards Received			
Water Supply	3403	8% increase	from 2015
Monitoring	1043	20% decrease	from 2015
Total:	4446		

Start Cards Received - "New"			
Water Supply	2666	6% increase	from 2015
Monitoring	392	1% decrease	from 2015
Total:	3058		

Well Reports Received	
Water Supply	3513
Monitoring	1142
Total:	4655

Well Reports - Type of Work	
New	3061
Deepening	100
Conversion	3
Abandonment	1098
Repair/Alteration	197
Multiple Type	75
Other Type	121
Total:	4655

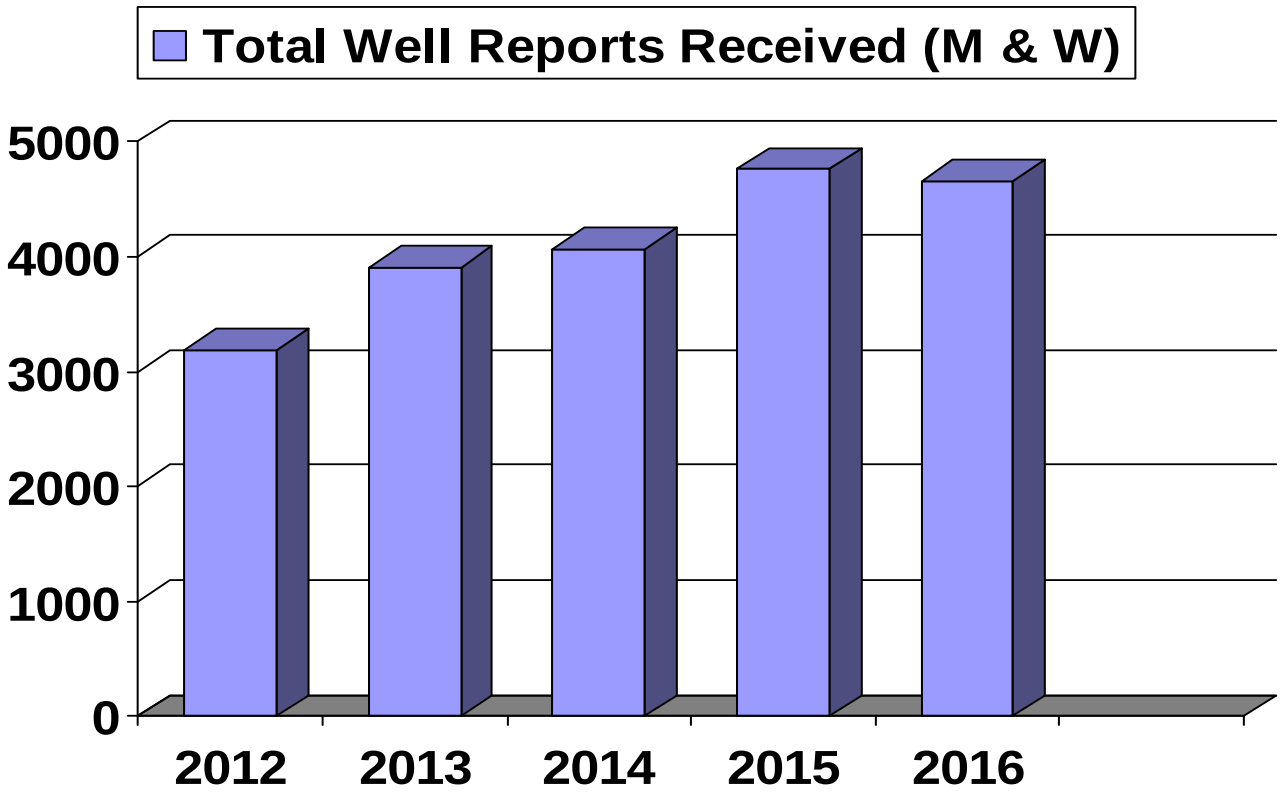
Geotechnical Hole Reports Received	
Geotechnical	5898

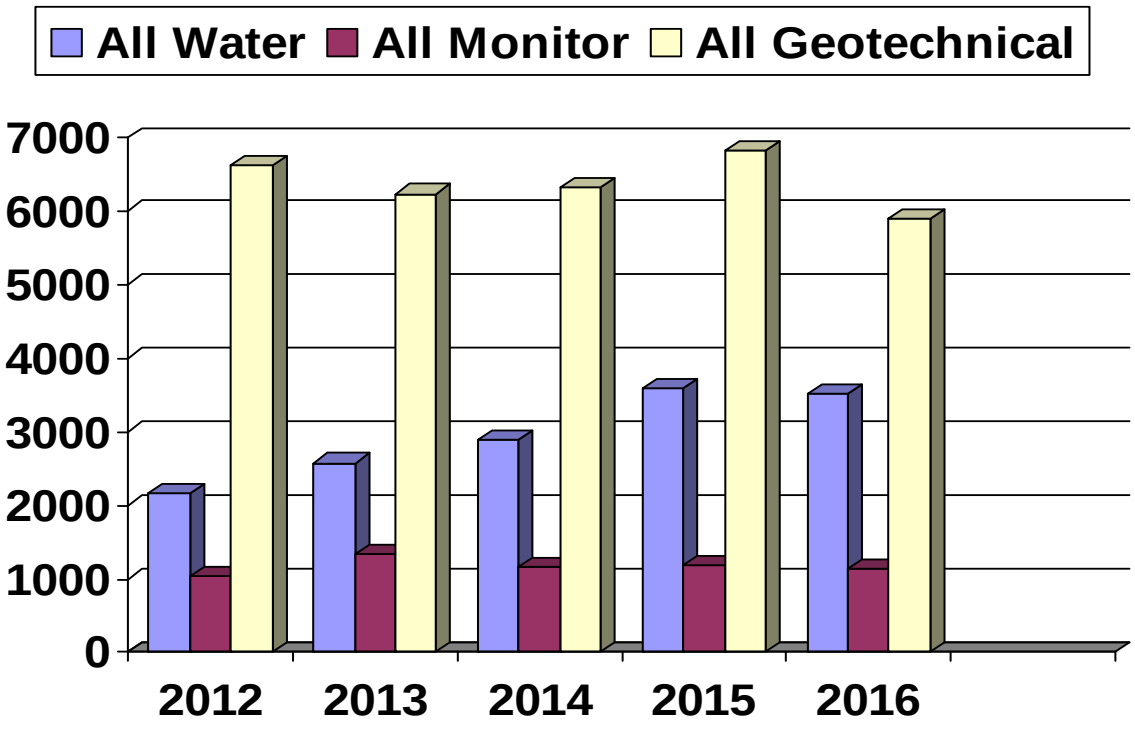
Well Reports Received by Use					
Domestic	2812	Industrial	32	Multiple Uses	93
Monitoring	1142	Injection	1	Dewatering	161
Irrigation	176	Thermal	0	Other Uses	37
Community	41	Livestock	160		

Well Reports Received - by County					
Baker	47	Harney	144	Morrow	44
Benton	132	Hood	6	Multnomah	401
Clackamas	342	Jackson	329	Polk	72
Clatsop	29	Jefferson	47	Sherman	1
Columbia	65	Josephine	262	Tillamook	29
Coos	77	Klamath	245	Umatilla	53
Crook	122	Lake	62	Union	73
Curry	41	Lane	357	Wallowa	27
Deschutes	305	Lincoln	46	Wasco	56
Douglas	138	Linn	199	Washington	362
Gilliam	9	Malheur	53	Wheeler	5
Grant	24	Marion	310	Yamhill	141

Well Inspections		
Number of Inspections (All Visits)	1403	
Wells Inspected (First Visit)	1307	
"New" Wells Inspected (First Visit)	1130	
Water Supply Wells	957	36%
Monitoring Wells	173	44%
% of "New" Wells Inspected (Combined)	37%	
"New" Wells With Deficiencies (1st Visit)	125	11%

Inspections (All Visits)	
Eastern	250
North Central	189
Northwest	492
South Central	260
Southwest	212


Total Well Reports Received (M & W)
5000
4000
3000
2000
1000
0
2012
2013
2014
2015
2016


All Water
All Monitor
All Geotechnical
7000
6000
5000
4000
3000
2000
1000
0
2012
2013
2014
2015
2016

Attachment 5

Measurement Device Status for Phase I & II Sig PODs within High Priority Watersheds

Summary Report of Statewide actions (12/31/2016)

Statewide Summary

Total Diversions with Measurement: 1036 (36 Measuring devices installed in 2016, 5 others confirmed* in 2016)

Total Diversions Inactive **: 658 (39 Total Inactive currently leased or transferred instream)

Total Diversions in Progress: 81

Total Diversions Needing Progress: 610

TOTAL HIGH PRIORITY SPODs: 2385

79 Measuring devices were installed in 2011

51 Measuring devices were installed in 2012

80 Measuring devices were installed in 2013 (32 others confirmed* in 2013)

84 Measuring devices were installed in 2014 (7 others confirmed* in 2014)

63 Measuring devices were installed in 2015 (7 others confirmed* in 2015)

*Confirmed is defined as a Sig POD with a measuring device confirmed to be present with an unknown installation date.

** Inactive is defined as: Present but not used, WR has been cancelled, the POD no longer exists, there was a POD transfer, the POD was not proved up on, or it was leased instream.

In 2000, The Water Resource Commission adopted a Water Measurement Strategy, focusing on diversions with the greatest impacts on stream flows, in areas with the greatest needs for fish. To implement the Commission's Measurement Strategy, OWRD is working with landowners, installing measurement devices at these significant diversions.

Sig PODs are defined as diversions within priority WAB's and, 1) surface water diversions that are required by OWRD to measure and/or report through a water right condition; or 2) a surface water diversion, without a measurement condition in the water right, that is either, a) greater than 5 cfs, or b) greater than 10% of the lowest monthly 50% exceedance flow, and greater than 0.25 cfs.