Appendix A – POD Interviews

Interviews were conducted to survey a diversity of Point Of Diversion (POD) uses throughout the department. Twelve people from IDWR were interviewed:

1. Technical Hydrologist – Hydrology Division
    - Water modeling of curtailment scenarios
2. Bureau Chief - Planning Division
    - Water projects constructed by the Water Resource Board
3. Section Manager - Adjudication Division
    - Water rights and adjudication in the State of Idaho
4. Hydrologist Tech - Planning Division
    - Water Accounting
5. State Floodplain Coordinator - Floodplain Division
    - Flood Plain mapping and Flood Modeling
6. Senior GIS Analyst – Geospatial Technology Division
    - Adjudication and Water rights
7. Section Manager – Water Rights Division
    - Water Rights in the State of Idaho
8. Section Manager – Water Distribution Division
    - POD Regulation, Water Measuring
9. Hydrogeologist – Groundwater Protection Division
    - Injection Wells, Well-related customer service
10. Systems Programmer Supervisor – Information Technology Div
    - Programming
11. Deputy Attorney General – Legal Division
    - Idaho water law issues
12. Section Manager – Hydrology Division
    - Water Modeling and Accounting

1. A Point of Diversion (POD), is often defined as "the location where water is diverted from the natural source". Do you agree with this definition?

All respondents agreed with this definition. One respondent added that a POD can also be defined as the location where water is diverted from a public water source but stressed that he is not suggesting the current definition should be changed.

1.b What is a natural source?

Most respondents replied that any natural stream, including its tributaries, is considered natural. Water is "chased" up tributaries as far as possible and all those tributaries are considered to be natural. All respondents agreed that a natural source can be perennial, intermittent or ephemeral. All respondents agreed that wells and springs that deliver water from a natural source, as well as lakes and ponds filled by water from natural sources are considered to be natural themselves. In general all respondents agreed that canals, ditches and laterals are man-made, and therefore water diverted in these structures is not considered to be natural.

One respondent pointed out that, while a "POD" is more rigidly, although not legally, defined; the definition of a "natural source" is not. This same respondent offered the

following definition for a natural source: “Any unregulated flow that would exist if there were no reservoirs or diversions, in other words, any flow that would exist if man had not interfered”. In some cases it can be hard to determine what is “natural” and what is not. Here are a couple of examples where it can be quite confusing trying to determine whether water is natural or not:

- The Great Feeder Canal in south eastern Idaho has a natural, i.e. not man-made, streambed although it has been altered by men. Water is diverted from the Snake River into the Great Feeder Canal which would indicate that this canal is not natural. However, the Great Feeder Canal also flows through an area with high ground water levels, which causes a natural inflow of water into the Great Feeder Canal which would indicate that at least portions of the water within this canal are natural.
- Thousand Springs is named for the numerous streams and rivulets coming out of the east wall of the Canyon and flowing into the Hagerman Valley between Bliss and Buhl in Idaho. These springs are outlets from the Snake River Plain Aquifer which is fed by natural streams such as the Lost River but also through recharge of water that at some point flowed through man-made canals and is thus not considered natural.

One respondent pointed out that Chapter 1 (42.103) of the Idaho Water Code specifies which water sources are subject to appropriation, and thus need to have a defined POD for using this water, and which water sources are exempt and can be used without a water right and its corresponding POD. The Idaho Code exempts private water such as swales or depressions where run-off water is collected. This “private water” needs to be limited to a private property. Another respondent mentioned that there are cases where a stream starts and ends on the same property, for example a small ephemeral stream or spring starts, but also “dies out” before leaving this property. People can use this water without needing a water right or a corresponding POD.

It is possible to guide natural flow through a man-made structure. For example, a natural stream can flow into a pipeline for some distance and still be considered “natural” as long as this pipeline does not change the direction of the flow. Similarly, certain portions of a natural stream can be channelized and remain ‘natural’ as long as those streams maintain the path of their natural flow.

Our floodplain expert added that anything that has been mapped by the Federal Emergency Management Agency (FEMA) is considered to be a natural source. For example, Five Mile Creek in Canyon County in Idaho is mapped by FEMA, and hence considered natural, even though it is also being used by an irrigation district to divert irrigation water. More information about FEMA’s mapped natural streams can be found at www.msc.fema.gov. According to FEMA, natural streams can be used for conveyance and storage of water during a flood event. Also, natural streams have a natural geomorphology and have biological significance for species that live in or nearby a natural stream.

All respondents agreed aquifers are natural, and that springs and wells used to extract water from those aquifers are points of diversion. The exception would be wells drilled for domestic use where the water is used on an area less than 0.5 of an acre since those wells do not need a water right and a corresponding POD. One respondent added that this situation is not always clear cut, since water used for irrigation can provide recharge to the aquifer. . One respondent pointed out a situation where people may be pumping water at a site without a POD. It is common that during the construction of a gravel pit,

water fills this pit. Diggers typically pump the water out of the pit so that they can keep digging. In this case, water is pumped, but not used.

Similarly, lakes and ponds fed by natural sources are also considered to be natural. One respondent added that water flowing through old mining tunnels can be considered natural. Another interesting scenario is aesthetic ponds which are created when someone digs a hole in the ground which then fills up with ground water. Since this groundwater is a natural source, the owner of the pond may need a water right if it is greater than a specified minimum size.

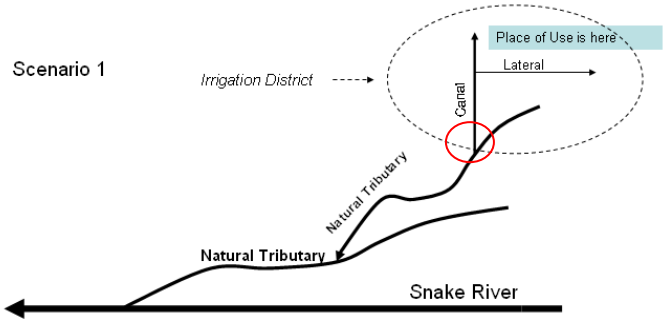
A special case is where water is diverted from one natural stream into a man-made structure that carries the water to another natural stream. The point of re-diversion if defined as the spot where water flows from the first natural stream into the man-made channel, and the point of re-injection is where the water flows from the man-made structure into the second natural stream.

Some disagreement consists among the respondents in regards to situations where the water in drain ditches and waste water channels are considered natural.

2. Scenario's

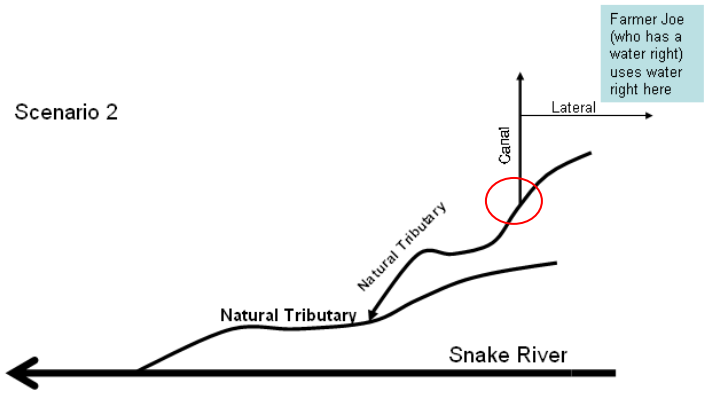
All interviewees were asked to identify the POD in the following scenarios:

<u>Scenario 1:</u>



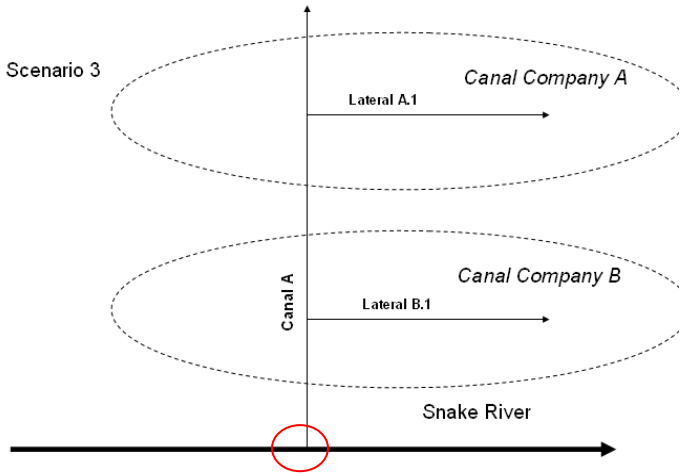
All respondents placed the POD at the location indicated by the red circle. It is very common in Idaho to have an irrigation district or canal company to hold a large water right and then deliver water to their shareholders. All interviewed people agreed that placing the POD at the red circle suits their business processes. For example, in a water accounting model a stream network is divided into reaches and the model computes the water gain and loss for each of those reaches based on inflow (from upstream reaches or storage) and outflow (water usage).

Scenario 2:



This scenario differs from the first in that “Farmer Joe” has his own water right and is thus not a shareholder in a water right held by an irrigation entity. This situation does occur, for example in the Northside Canal Company where Farmer Joe will pays a fee to the Northside Canal Company for the use of their lateral, but has his own water right. This situation also occurs when homeowners have a water right because they like to have water in a canal near their home in the winter for aesthetic purposes. All parties agreed on the location of the POD (indicated by the red circle), and all agreed that this works for their business processes.

Scenario 3**:**

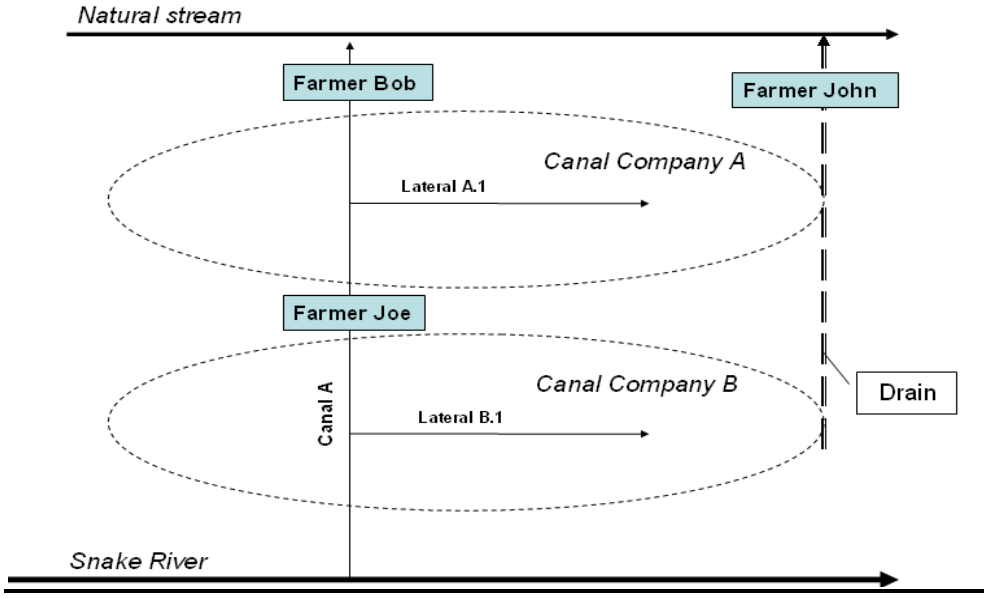


In this scenario water flows from the Snake River into Canal A where water is first diverted into Canal Company B, and then diverted to Canal Company A. All respondents agreed that the point of the diversion for both Canal Company A and Canal Company B was in the location indicated by the red circle.

This example illustrates that it is possible to have multiple PODs, for all water right holders for whom water is diverted at a given point, at exactly the same location. One respondent mentioned as an example the location where the Eastside Canal diverts water from the Big Lost River. It is the goal of IDWR to have an identical location for

each of those “stacked” water rights, but there are still numerous instances where those PODs are spatially scattered.

Talking about scenario 3 quickly evolved into a discussion about drains and waste water channels and whether those channels are natural and therefore could have PODs. The following graph was not part of the interview, but captures details that were obtained during some of the interviews:



Farmer Joe holds a water right to the water leaving Canal Company B. One respondent mentioned that the portion of Canal A running past Farmer Joe could be called a conveyance drain and that it is not uncommon to have points of diversion on the conveyance drain. Farmer Joe’s water right would be junior to that of both Canal Companies. Two respondents disagreed and said that Joe’s POD would still be at the point where Canal A leaves the Snake River.

Most respondents agreed that it is more likely to have situations where Farmer Bob would have water from two different sources: (1) water from the Snake River that is specifically diverted for him, in which case his POD is where Canal A intersects the Snake River, or (2) waste (or “leftover”) water from water that was diverted specifically for Canal Companies A and B. In this case, Farmer Bob’s POD can be on his property along Canal A. Farmer Bob’s water right is typically junior to the water rights held by Canal Company A and B. So, if there is a shortage of water, then Farmer Bob may not receive water.

One respondent disagreed. Water applied to land in Canal Companies A and B, but that are not used by plants or evaporated will seep into the drain that runs past Farmer John’s property. This respondent argued that it is along those types of drains that PODs are allowed.

3. What do you call diversions that divert water from a man-made canal or lateral, and are those types of diversions relevant for your business purposes?

Since man-made canals are not natural, diversion structures such as check gates and pumps are NOT referred to as "points of diversions' per department policy. Currently, there does not appear to be a unifying term for such structures, although some suggested terms were "field head gates", "POD but with a different meaning", "artificial hydrography" or "heading". Most respondents suggested to just to call them what they are, for example, "pump", "dam" or "check gate".

Locations of these diversion structures can be useful in water modeling. For example, when planning a recharge project where water is diverted through canals for the purpose of recharging the aquifer, the amount of water that is diverted through the canals is needed. This type of information would be extremely useful for canal companies and irrigation districts where such recharge projects are being planned by IDWR. While diversion structures can be useful in some applications to water modelers, the most useful product is system maps showing where canals and laterals are, and how they interact.

Planning and flood plain modeling also agreed that information about these diversion structures can be useful. Currently FEMA only maps natural streams, but canals and laterals play an important role during flood events and the locations of canals and laterals, as well as diversion structures along those channels, are crucial. For example, by only looking at natural streams, FEMA has concluded that the City of Caldwell, Idaho is in a flood plain because during a flood event water from Indian Creek would flow into the City. FEMA does not take into account that during such an event, the New York Canal can divert water away from the city and help prevent flooding. Information about diversions of man-made canals and laterals could probably also be used in FEMA's HAZUS model which simulates flood impacts.

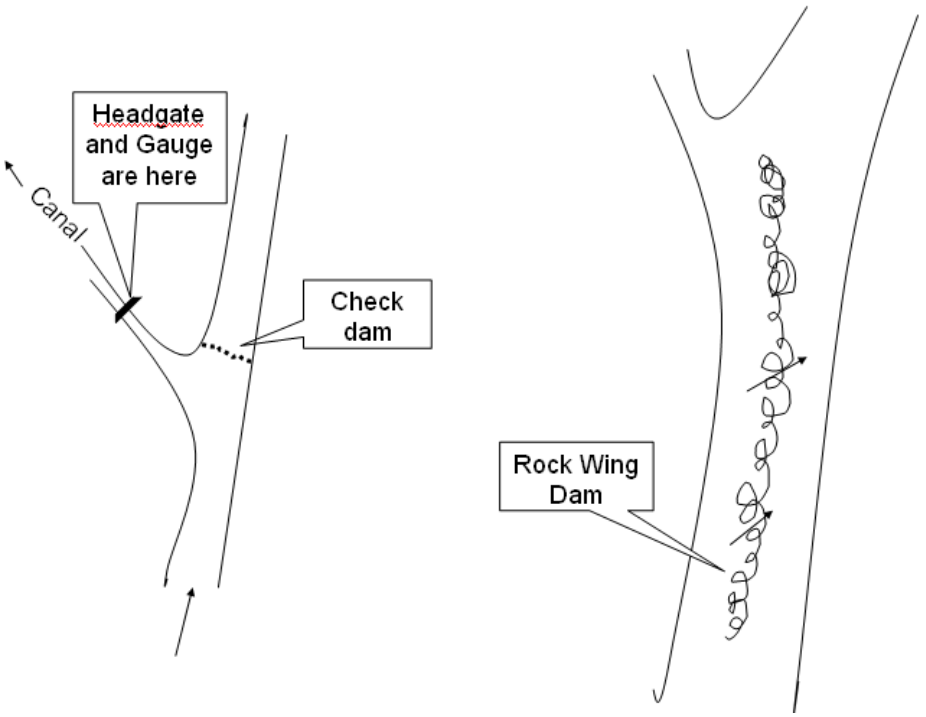
Some respondents stated that as we get more types of diversion data collected, more uses for these datasets will become apparent.

4. Which of the following items do you consider to be PODs, assuming that they are located on a natural stream.

One respondent provided the following general definition: "Anything that diverts water from a natural source. This could be a large dam but also things like sheets of plastic, pipes or – in one case – a bus parked in a natural stream". Another person added ".. a person holding a water right must demonstrate that they are capable of diverting the specified amount of water from the location specified in a water right. It does not matter how this person does that. So, if this person hauls water out of the stream manually using buckets, that would also be considered a POD."

Head gates	All respondents consider this to be a POD. One respondent pointed out that the location of a head gate is not always the same as a POD. This is explained in Box 1 below this table.
Check gates	Respondents were divided, 60% said "yes", and 40% said "no". One person stated that check gates are not points of diversion

	because they are not used to divert flows, but only control flows. Another person specified that as long as it diverts water into an associated canal it is a POD.
Other gates	Some respondents stated that there are different variations of a head gate. One person mentioned a “Calliope Gate” as found in Indian Creek.
Pumps	All respondents agreed that pumps can be points of diversion. This includes lift pumps, as long as they are used to divert water out of a natural stream.
Dams	All respondents consider this to be a POD. One respondent pointed out that the location of a dam is not always the same as a POD. This is explained in Box 1 below this table.
Gages	All respondents agreed that gages are not points of diversions. One mentioned that the casing in which the gauge resides could divert water. Some mentioned that gauges are frequently placed at the same location as a structure that would be classified as a POD.
Weirs	All respondents agreed that weirs are not PODs, although they can be in the same location as a diversion structure.
Wells	All respondents agreed that wells are PODs.
Fish Screens or Fish Traps	Most respondents agreed that fish traps or screens are not a POD. One respondent added that there are cases where a considerable amount of water is diverted away from the natural stream for fish purposes, and that it could be some distance before this water re-enters the same natural stream.
Others	The floodplain expert stated that diversion structures such as levees, culverts, push-up dams, flumes and storm water retention structures are relevant to her work. A different person mentioned that there are water wheels in Oregon which are considered diversion structures, but this person was not aware of any such structures in Idaho.



The figure on the left shows that the check dam diverts water, but the head gate may be upstream.

The figure on the right shows a rock wing dam where water flows separated for about a mile before it enters a canal (going NW). Water can still leave the “diversion” on the left side of the natural stream and flow over the rock wing dam into the right hand side of the stream that continues NE as a natural stream. Is the POD at the south end of the dam, or at the point where it turns left into the canal?

A good example of where a Water Management Information System (WMIS) point is not the same as the POD is Thousand Springs. The POD is where the water leaves the rock, the WMIS point is on the ground where the measuring station is.

Box 1: Cases where dams and gates are not in the same location as a POD

5. How should Idaho deal with water entering and leaving the State of Idaho?

There are a variety of situations where water is diverted from a natural stream in a neighboring state, but has a place of use in Idaho. For example, the Upper Teton River originates in Wyoming, and contains water that is diverted from Jackson Reservoir in Wyoming.

Frequently such a POD is “located” in the database on the State boundary, while the true location where water is diverted from a natural stream falls outside the State. Two respondents explained that it is currently not possible to store PODs in certain locations out of state since the attribute field storing the information about the Range (of the PLS system) can only hold 2 digits, but many out of state locations have a Range that is greater than 99. The solution for this problem is described in “Condition F15” which is part of a water rights description.

Multiple respondents stated that placing the POD on the border produces limited information and the POD database should be fixed to allow storage of out-of-State locations. This person added that not just POD databases, but many GIS layers stop at the border while they should at least include complete basins that are of interest to Idaho. For example, GIS layers should encompass the entire Upper Snake Basin.

Another respondent stated that, although he wished the POD was located at the actual place of diversion, having it at the State boundary is not causing grief. What is challenging is how to deal administratively with such interstate issues.

Idaho maintains agreements with bordering states about the amount of water that flows across state boundaries.

For water leaving Idaho, the POD should fall at the location where water is diverted from the natural stream, even if the place of use is in a neighboring State. This situation is described in, “Condition F16” of the water rights description. In those cases, the place of use is manually digitized, and can generally not be entered into the legal description because there are not enough digits to store the neighboring state’s township information. For these locations, the first digit of the township is left off and the POD is designated with additional attributes to compensate for the digit limitation and differentiate the location.

One respondent mentioned that we have started to spatially locate PODs out of State, for example PODs found along Jim Bob Creek in Nevada. The problem is that PLS coordinates are not unique; so IDWR has added an additional “County” and principal meridian attribute field that will help users verify the location.

All respondents agreed that it would be better if the legal and spatial location of a POD would fall in the correct location, even if this location is outside Idaho.

The Planning, Water Rights, and Adjudication divisions feel that the way IDWR currently deals with out of State PODs work for their business processes. Other departments, for example, Water Accounting Modeling, stated that this data would need to be modified to work for their business purposes.

6a. Which IDWR databases containing POD data do you use?

Table 6.1. Database use per discipline. Table 6.2 explains the footnotes listed in table 6.1

Department / Feature Dataset	Water modeling [1]	Planning [2]	Adjudication	Water Accounting [3]	Flood Plain [4]	Adjudication /Water Rights [5]	Water Rights [6]	Regulation and Water Measuring [7]	Legal	Systems Programmer	Wells [8]
SpatialData *-Unique ID & spatial locations for features of interest to IDWR business processes.*		X	X			X	X	X			
WMIS (Water Measurement Information System) *- Annual volume data for primarily groundwater wells, incl. some springs*	X	X				X	X	X	X	X	
*Water Rights – Application		X				X	X	X	X	X	
*Water Rights – Permit		X				X	X	X	X	X	
*Water Rights		X	X			X	X	X	X	X	
*Water Rights - Transfers		X				X	X	X	X	X	
*Adjudication Claims		X	X			X	X	X	X	X	
*Adjudication Recommendations		X	X			X	X	X	X	X	
*Adjudication Transfers		X				X	X	X	X	X	
Well Construction	X	X				X		X	X	X	
Wells managed by the USGS	X	X									
Wells data managed by S. Baker	X							X			
Ground Water Monitoring Wells	X	X				X					
Geothermal Wells	X	X				X					
Wells in Public Water Supply Data	X	X				X					
Wells maintained by other agencies	X					X					
Underground Injection Control Wells						X			X		X

Gages maintained by the USGS	X	X		X				X			
Dam Safety Database		X			X	X					

Table 6.2: Footnotes for Table 2.1

* *IDWR Water Rights Databases:*

Shapefiles for Water Rights (WR) were originally developed from GCDB QQ for Place of Use (POU) or GCDB QQ/QQQ centroids for Points of Diversion (POD). If better information is available, irrigation POU and PODs are screen-digitized from Aerial Photos or GPS locations. WR can be in one or more of five process or stages; Application of new WR or transfer, Permit (water use is allowed to develop), License (IDWR has approved final configuration and amounts), Claim (WR has been claimed in an adjudication), Recommendation (what IDWR recommends to the court. A recommendation, when approved by the court, supercedes it's License.

1 *Water Modeling:*

Water Modeling uses other information, such as gages maintained by Idaho Power. In addition, IDWR measures sites and maintains in-house data regarding these sites, but this data is not part of an agency-wide database. It is, however shared among a smaller number of IDWR employees.

2 *Planning*:

The Planning group uses information maintained in the "SpatialData" dataset secondary to project-specific data. For example, PODs in the area of interest are GPS'd and stored into a local database. This data is not currently part of an agency-wide database. Planning also uses other information, such as gages, maintained by Idaho Power and IDWR. The IDWR gage data is not a part of an agency-wide database, but is shared among a smaller number of IDWR employees.

3 *Water Accounting*:

The representative for Water Accounting was a programmer who builds water accounting models. The models are used for billing and allocating water throughout a basin. .

Water Accounting also uses information regarding gages maintained by the Bureau of Reclamation or by individual irrigation entities.

4 *Floodplain*:

Floodplain mapping and modeling does not currently use any of the IDWR listed databases. They do use data that they collect themselves and data they receive from FEMA, Bureau of Reclamation and Corps of Engineers. They also use gage data from the Northwest River Forecast Center (http://www.nwrfc.noaa.gov/).

5 *Adjudication/Water Rights*:

Adjudication/Water Rights uses Groundwater Monitoring, Geothermal Wells, Idaho Department of Agriculture, and Public Well Supply data maintained by the Idaho Department of Environmental Quality. They also use data from the

	Bureau of Reclamation, the Bureau of Land Management, the Idaho Department of Parks and Recreation, and the IDWR Underground Injection Control Wells Database for the wells that have been issued permits.

Table 2.2 Continued	
6	*Water Rights*: Water Rights maintains a spreadsheet with temporary appropriations, for example, annual renewals. Those appropriations are only meant to be valid for a limited time, for example an appropriation for dust abatement during exploratory drilling. Information about pumps and dams can be found in the description associated with a water right but not directly in the Water Right Database.
7	*Regulation and Water Measuring*: Additional gage information used by Regulation and Water Measuring include Eastern Snake Plain Aquifer (ESPA) monitoring stations and those maintained by Idaho Power and IDWR. There are plans to include the ESPA monitoring stations in the "SpatialData" dataset in the future. Regulation and Water Measuring sections within IDWR receive annual reports from Idaho Power Company (IPCO) and other utilities in Idaho showing power consumption records for irrigation wells. Based on this data how much water that has been pumped for individual wells can be estimated and Power Consumption Coefficients (PCC's) are developed.
8	*Wells*: The Groundwater Monitoring and Geothermal Wells databases are in the process of being linked to the Well Construction database. The goal is to coordinate and link information between separate well databases and link them through identifiers within the Well construction database and the "SpatialData" dataset. Underground Injection Wells (UIC) information is not currently part of an agency-wide database.

6b Are there any databases you would like to have?

Our floodplain expert would like to have a way to map cross sections of a floodplain, and the location of PODs in each cross section. She also mentioned she would like to have more LIDAR data.

Planning indicated they would like to have a database showing historical diversion rates and allowable rate of flow (cfs) for POD's.

Floodplain Mapping would like to have additional structural information about PODs, for example whether a weir is made out of concrete, or whether a dam is made of earth or other material. Flood plain mapping is also interested in information about volume and flow rates, as well as season of use for various PODs.

Our Wells expert would like to see a database that allows him to cross-reference A-tag ID's with other tags (for example D-tags or E-tags). This would allow him to answer questions from customers who supply him with the A-tag ID for the well in question.

7. Sources of points of diversion data

POD data is collected when somebody applies for, or transfers a water right. Historically, the locations of those diversions were identified by the quarter quarter (QQ) in which they are located. A QQ, which has a surface area of 40 acres, and is the sixteenth of a section found in the PLS system.

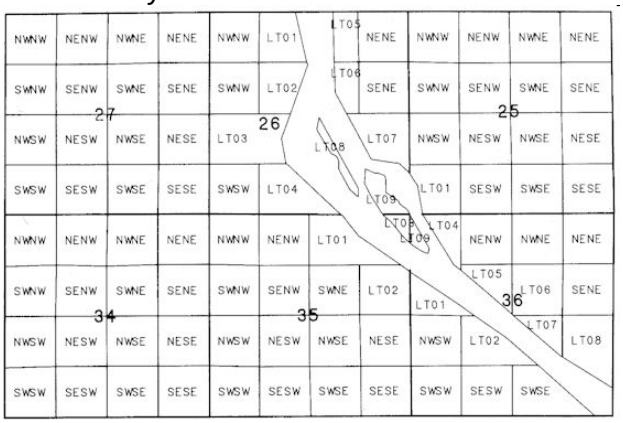


Figure 7.1. Quarter quarters are one sixteenth of a section in the PLS system.

Given the age of many water rights, and the spatial data available at the time those water rights were recorded, it is not surprising that some water rights may not have been recorded in the correct QQ. One respondent explained that during the last 10 years, the location of a POD has become more accurate. With only QQ data available, a POD is frequently placed in the center of the QQ, which may or may not coincide with a stream or other natural source described in the water right.

More recently IDWR has sent out agents to GPS POD locations, and several respondents would like to have available resources to do this for all PODs. One respondent added that those GPS points can only be used when it is part of a beneficial use report that has gone through a legal process. Another person stressed that an agent should be absolutely sure they are GPS-ing he correct structure. IDWR maintains information about whether a GPS point was added into the enterprise database manually or electronically. Our systems programmer added that data is collected through the various "work flow" processes at IDWR in order to enter data into our enterprise database.

Information about Underground Injection Wells (UIC) is collected by IDWR employees, or supplied to IDWR by well drillers. Most wells that were drilled more than 10 years ago are spatially located based on a PLS description and are plotted at the center of a QQ. This often causes problems when answering customer inquiries about a specific well,

since there could be as many as 10 different wells stacked in the center of a QQ. In those cases, it can be difficult to determine ownership of each well. More recently, wells have been spatially located using GPS. In 2009, IDWR changed its rules and will now only accept new wells that have both a PLS and a GPS location.

Respondents have mentioned that we could benefit by modifying some of our business processes by reviewing and possibly incorporating accurate diversion location information from other agencies. We also have some constraints on POD location based on locations identified by public land survey locations.

One respondent pointed out that sometimes a POD does not appear to be tied to a stream, because the stream may not appear in the NHD because it is too small.

Various respondents agreed that it would be interesting to see what percentage of PODs need to be moved, and how far they would need to be moved in order to be tied to the NHD. Additionally, it would be interesting to see how many PODs fall in a different QQ than described in the water right data. With those estimates in hand, it could be possible to get an idea of the time required and legal challenges to overcome if IDWR decided to move PODs to the most accurate position available, and if those legal efforts would be worthwhile.

Some respondents stated that the current system works for them, and it is not a major problem that some POD's are not in the exact location. One respondent added that, if a water right is not in exactly the correct location, it will not take much research to find its correct location. In most cases, the POD is near the border of the correct QQ, and typically the correct location can be found by cross-referencing the water rights database with other databases, such as the wells database or aerial imagery. Multiple respondents stated that having an accurate location for a POD is important and necessary for many business processes.

8. Can IDWR improve how it collects and stores POD data?

Most respondents agreed that IDWR could, and already is, improving the collection of new spatial data. Proposed points of diversion are GPS-ed, and IDWR staff uses a variety of imagery, taxlot data, and USGS topographic maps to help verify the location of a POD.

One respondent mentioned he is particularly interested in how PODs are spatially related to each other, and also interested in the prospect of tying them to the NHD. The ability to trace upstream or downstream and display the order of the PODs would be a beneficial addition to some of his workflow applications.

Another respondent would like to see consistent names for wells that appear in multiple IDWR databases. For example, this person would like to link multiple databases and display a POD layer showing all pumping rates and water right priority dates. One respondent added that incorporating the Underground Injection Wells (UIC) to the SpatialData Layer, and, ultimately into the Enterprise Database, would be beneficial.

Two respondents said that it would be really helpful if there was a canal name associated with a POD which could be stored in the "DiversionName" attribute field. This

is especially true when two canals divert water in opposite directions from the same location in a natural stream. Entering the DiversionName was not on the SRBA forms used to enter this data, but names were often entered into the “Remarks” field, although there are many records where this information is missing.

It would also be helpful if more PODs had a description in their “DiversionWorks” attribute field that would store a description of the pump or gate associated with the POD.

IDWR is working hard to ensure that PODs in the same spatial location also appear in the same location in the database. Currently, many PODs are still scattered which can make it difficult for the database user to determine which point represents the correct location.

One respondent would like to see a stand-alone interface for entering POD data that did not require opening the entire ArcMap application. interface.

One respondent would like a simplified approach to query the enterprise POD database and select all “PODs that are not groundwater”.

9. Water Banks

Water banks are used to temporarily re-distribute water. There are two main components:

(1) Water banking, using “supply pools” for the purpose of maintaining minimum stream flows. This program is directed by the Idaho Water Resource Board.and is not part of the enterprise POD database. This information is stored and maintained in an Access database, consisting of very basic water right information.

(2) Local Storage, also referred to as “rental pools”. This can be managed by the district watermasters, with the approval of the IDWR Director.

The challenge with this type of data is that it is temporary and interacts with the enterprise POD database. For example, water appropriated by a water right belonging to Joe is used in 2009 by Jill. Since this situation is only temporary, it should not be changed in the Enterprise database. One respondent would like the capability of being able to query a water right to find out who is using the water or if it is available. If it is available, perhaps it can be leased to another water user

10. Symbolization

IDWR does not use standard symbology for PODs with most respondents using the symbology set by WREdit. One person complained that the colors are not well chosen for people that are color blind.

Most respondents agreed that it would not hurt to standardize POD symbolization across the entire IDWR agency but all stated that this would be a low priority project. One stated that standardized symbolization should be not too rigid, since, depending on background layers and colors one symbolization scheme would work better than another. Also, the

symbolization of a specific point feature may be different from one map to the next based on the purpose of a map.

One respondent added that we should follow USGS Topographic Map conventions where they exist. Ultimately, it does not matter very much as long as there is a clear legend that explains the symbolization.

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