



**Regional Approaches to Providing
Drinking Water and Wastewater Services
and
Stormwater and Drainage Management**

Results from Statewide Listening Sessions

Final Report



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Executive Summary

The Idaho Department of Environmental Quality (DEQ), at the direction of the Idaho State Legislature, conducted a series of listening sessions to document the perspectives of different constituencies statewide on two topics: regional approaches to providing drinking water and sanitary sewer services; and stormwater and drainage management.

DEQ hosted listening sessions in Coeur d'Alene, Pocatello, and Boise. The sessions were divided into three interest areas: agricultural interests; utility interests; and other government interests. Separate sessions for each interest area were conducted to allow for an in-depth exploration of the topic areas from different perspectives. Listening session agendas for the utility and other government entities included two topics – regional approaches to providing drinking water and sanitary sewer services, and stormwater and drainage management. Three sessions were conducted with agricultural interests; the first two focused on stormwater and drainage management, while the third session focused on regional approaches to water and sewer service provision.

Regionalization Approaches

During each listening session, a substantial portion of time was devoted to discussion of regional approaches to drinking water and sanitary sewer provision. At the outset of each regional approach session, participants were asked to think of “regionalization” as a continuum of possible activities ranging from basic sharing of information among utility managers in a given region all the way through fully integrated regional infrastructure operated with an independent governance structure (e.g., a regional board). Session participants were then asked to consider a series of questions exploring current challenges to providing drinking water and sanitary sewer services, the role/benefits regional approaches could play in addressing the identified challenges, barriers to adoption of further regional approaches, and the potential state role for encouraging further utilization of regional approaches.

In each of the three areas of the state in which listening sessions took place, participants were quick to note that significant regional approaches have already been implemented and/or are currently in the discussion phase. These approaches include shared capacity arrangements, most often taking the form of an individual jurisdiction providing, under contract, treatment capacity to other jurisdictions that continue to own/operate their collection and/or distribution systems. Many participants looked to make it clear that they are very comfortable with the level and pace of adoption of regional approaches within their jurisdictions/regions. These participants believed regional approaches are being used to an appropriate extent and did not see a strong need for significant state intervention. At the same time, most participants did see some degree of opportunity for furthering regional approach adoption.

After discussion of drinking water and sanitary sewer provision challenges and the potential benefits of furthering the use of regional approaches, session participants were asked to identify the barriers to adoption of regional approaches. Two very consistent themes emerged from these discussions: the pattern and nature of development in unincorporated areas is often partially to

wholly incompatible with regionalized drinking water and sanitary sewer provision; and the desire to maintain jurisdictional autonomy regularly outweighs the potential benefits of participating in regional approaches involving shared capacity and governance.

Given the challenges associated with regionalization of drinking water and sanitary sewer services, listening session participants asserted that there generally needs to be a very compelling reason to implement a regional approach such as a high concern of water quality non-compliance (e.g., inability of small community systems to meet more stringent limits), clear demonstration that the costs of individual systems will be significantly higher than a regionalized system, substantial water supply management issues in the context of a shared water source among separate local jurisdictions, and/or concern for or the reality of aquifer contamination as a result of poor oversight/management of decentralized systems. The drivers, however, for pursuing regional approaches to drinking water are not as strong. All of this is then further complicated by the pattern of new, unincorporated development, which both sets up potential long term problems, and simultaneously increases the challenges for future regional approaches through a lack of standards and patchwork development incompatible with regionalization. Session participants, in this context, did identify several opportunities for increasing the attractiveness of adopting regional approaches, including the following: model joint ownership agreements; influencing development in unincorporated areas; conducting pilot efforts; supporting development of master regional water and sewer plans; and creating financial incentives – such as through the SRF – for regional approaches.

Stormwater and Drainage Management

During the stormwater and drainage management portion of the listening sessions, participants were asked to identify key challenges faced by jurisdictions in providing stormwater and drainage management; methods and approaches that have been used by other jurisdictions, or could be used in the future to address those challenges; and whether there is a regional aspect to any of the methods and approaches. They were further asked to describe whether there is a role the State can play in supporting solutions to the identified challenges.

Across the listening sessions, a high degree of overlap existed among the identified stormwater and drainage management challenges. Two overarching categories of challenges emerged. First, participants identified acquiring the institutional capacity necessary to establish explicit stormwater management programs consistent with existing and emergent Clean Water Act requirements in the form of the NPDES permits and Water Quality Standards as a key, overarching challenge. Second, participants indicated that facilitating effective integration of urban and suburban drainage needs and systems with agricultural irrigation drainage needs and systems has been complex, with substantial work remaining to sort out appropriate roles, responsibilities, liabilities, and financing among jurisdictions.

Listening session participants were asked to identify potential methods and approaches that could be utilized to address new stormwater management requirements, and challenges associated with the complicated interface between agricultural and urban/suburban drainage needs. Participants were further asked if there are any regional aspects of the potential methods and approaches. Participants identified several potentially helpful approaches including the following: formation

of basin-wide management entities; education and outreach; tailored state-wide guidance; sharing of national experience; and integration of stormwater/drainage management planning with pre-development.

Listening session participants were asked to explore whether they see a specific role for the State to play to support the potential methods and approaches to address stormwater and drainage management challenges that were discussed. Many of the ideas documented emerged in the context of an expressed interest in enabling some type of regional entities to provide general oversight, coordination, and management of stormwater and drainage resources. Participants indicated a sense that developing such entities around the state could leverage existing government organizations, thereby avoiding creating an additional layer of bureaucracy. Four key ideas emerged out of the eight listening sessions. First, creating enabling legislation, second, providing support for regional forums, third drafting MS4 guidance materials and creating a centralized repository to house them, and fourth hosting a statewide workshop for stormwater and drainage managers.

Potential Paths Forward

A high degree of consistency emerged from the listening sessions regarding challenges and associated needs related to drinking water, sanitary sewer, and stormwater/drainage management across the state. This consistency suggests an opportunity for state action to assist local communities throughout the state more efficiently and effectively address the challenges they face. In this context, it is important to point out that many participants did indicate a reasonable degree of comfort with the degree and pace of the adoption of regional approaches to drinking water and sanitary sewer services, even as they saw some specific opportunities for a state role and viewed regional approaches as well suited to address many of the identified drinking water and sanitary sewer challenges. Looking across listening session discussions five areas emerge as strong candidates for further consideration for state-level action: influencing the pattern and type of development in unincorporated areas; building stormwater/drainage management institutional capacity; bringing a regional approach to the agricultural/urban stormwater/drainage management interface; facilitated voluntary or structured basin-wide planning; and improving capital funding options for communities.

Background

The Idaho Department of Environmental Quality (DEQ), at the direction of the Idaho State Legislature, conducted a series of listening sessions to document the perspectives of different constituencies statewide on two topics: regional approaches to providing drinking water and sanitary sewer services; and stormwater and drainage management.

In the context of regional aspects of drinking water and sanitary sewer services, the charge to DEQ was “to study, with input from cities, counties, water and sewer districts and other relevant entities, methods to encourage and provide incentives for the development and operation of regional water and wastewater services, and to prepare a report documenting its findings” (Sen. Con. Res. No. 130, 58th Cong.). During the listening sessions, ‘regional aspects’ was defined

broadly as a range of activities from multiple entities sharing technical expertise to combining collection and treatment systems under a single governance structure. In terms of stormwater and drainage management, the purpose of the listening sessions was to explore the needs, challenges, and potential approaches related to addressing new stormwater management requirements and general drainage management, with a focus on the role of population growth and the conversion of agricultural land to residential and commercial use.

DEQ hosted listening sessions in Coeur d'Alene, Pocatello, and Boise. The sessions were divided into three interest areas: agricultural interests, utility interests, and other government interests. Separate sessions for each interest area were conducted to allow for an in-depth exploration of the topic areas from different perspectives. Listening session agendas for the utility and other government entities included two topics: regional approaches to providing drinking water and sanitary sewer services, and stormwater and drainage management. Three sessions were conducted with agricultural interests; the first two focused on stormwater and drainage management, while the third session focused on regional approaches to water and sewer service provision.

A single listening session was held in Coeur d'Alene. This session focused on utility interests only, due to the lack of a significant irrigated agricultural presence in the Idaho panhandle and a lack of availability for participation in an other government interests session. Three listening sessions were held in Pocatello, and four in Boise. The additional Boise session was held to give agricultural interests the opportunity to discuss regional aspects of water and sanitary sewer provision. For each of the eight listening sessions, a draft summary was prepared and reviewed by session participants for accuracy and completeness.

This report is a synthesis of the eight listening sessions. It has been provided to all listening session participants for review and comment prior to finalization. The remainder of the text is divided into three sections: regionalization of drinking water and sanitary sewer services; stormwater and drainage management; and the potential paths forward.

Topic 1: Regionalization of Drinking Water and Sanitary Sewer Services

During each listening session, a substantial portion of time was devoted to discussion of regional approaches to drinking water and sanitary sewer provision. At the outset of each regional approach session, participants were asked to think of “regionalization” as a continuum of possible activities ranging from basic sharing of information among utility managers in a given region all the way through fully integrated regional infrastructure operated with an independent governance structure (e.g., a regional board). Session participants were then asked to consider a series of questions exploring current challenges to providing drinking water and sanitary sewer services, the role/benefits regional approaches could play in addressing the identified challenges, barriers to adoption of further regional approaches, and the potential state role for encouraging further utilization of regional approaches.

In each of the three areas of the state in which listening sessions took place, participants were quick to note that significant regional approaches have already been implemented and/or are currently in the discussion phase. These approaches include shared capacity arrangements, most often taking the form of an individual jurisdiction providing, under contract, treatment capacity to other jurisdictions that continue to own/operate their collection and/or distribution systems. Many participants looked to make it clear that they are very comfortable with the level and pace of adoption of regional approaches within their jurisdictions/regions. These participants believed regional approaches are being used to an appropriate extent and did not see a strong need for significant state intervention. At the same time, most participants did see some degree of opportunity for furthering regional approach adoption.

The remainder of this section is organized into four parts: challenges faced by Idaho drinking water and sanitary sewer providers; benefits of furthering regional approaches; challenges to furthering regional approaches; and the potential State role.

1.1 Challenges Faced by Idaho Drinking Water and Sanitary Sewer Providers

The regional approach to drinking water and sanitary sewer provision portion of each listening session began with a discussion of current challenges faced by the sector. Potential regional approaches and their associated benefits were then discussed in the context of these challenges. Participants identified an array of challenges as identified below.

1. ***Meeting new drinking water and sanitary sewer capacity demands.*** Several participants observed that, in many parts of the state, population and economic growth within and adjacent to incorporated areas is driving the need for capacity expansion of drinking water and sanitary sewer systems, heightening the associated pressure on capital funding requirements and local water and sewer rate affordability.
2. ***Compliance challenges.*** Many participants indicated that new National Pollution Discharge Elimination System (NPDES) discharge limits due to interpretations of Total Maximum Daily Load (TMDL) plans and implementation along with other treatment standards are requiring expanded capacity and are changing the nature of the treatment that must take place. The participants indicated this leads to an increase in the need for treatment systems of greater technical sophistication. The new requirements are also complex, increasing the requirement for staff specialization to ensure regulatory requirements are understood and met.
3. ***Aging infrastructure.*** A few participants observed that drinking water and wastewater systems are in need of updates and/or replacements to portions of their infrastructure such as treatment facilities and collection and distribution systems. This challenge is exacerbated by rate structures for some utilities that are not fully consistent with the funding necessary to meet the updates and replacement needs in a timely manner.

4. **Limited staff capacity.** A number of participants (particularly those attuned to or concerned about small and medium size cities/towns) indicated that communities are experiencing difficulty securing staff with the technical expertise and training necessary for them to legally operate and manage wastewater treatment plants and collection systems. Listening session participants identified two main drivers behind this trend. First, systems are requiring greater sophistication as they expand capacity and struggle to meet new and more stringent limits (see points 1, 2, and 3 above). Second, the Idaho legislature recently passed new operator certification requirements designed to ensure systems are operated and maintained properly. The requirement, however, has created a short-term gap between the availability of certified operators and the need for such operators. This situation is playing out in a broader demographic context where the sector is experiencing an aging workforce and is finding it challenging to attract and retain qualified personnel. In effect, Idaho is caught up in a challenging national trend – demand for technically qualified operators is increasing while supply is decreasing.
5. **Funding.** Expanded capacity needs, increased treatment sophistication, and repair/replacement of aging infrastructure is placing substantial capital funding burdens on many communities according to a wide range of participants. These participants identified the State Revolving Fund (SRF) as an important source of funding, but said that the extensive administrative requirements create a disincentive for use compared to bonding. Further, court decisions such as *Loomis v. City of Hailey* are viewed as having decreased the ability of drinking water and sanitary sewer providers to fund future capacity needs.
6. **Aquifer protection.** Many participants indicated that many residents of Idaho share common ground water supplies that, in places, come very close to the surface. For these participants, shallow aquifer water supply contamination is a key concern. Certain, and possibly many, jurisdictions depend on water supplies, the recharge for which resides outside of their areas of direct jurisdictional influence. Participants indicated that the use of “decentralized” water and sewer provision approaches (e.g., individual wells for drinking water, and individual septic systems or small scale “package plants” for wastewater) raises particular concerns in this context as they are viewed as potentially more prone to limited oversight, poor maintenance, and overall poor management. This leaves these jurisdictions vulnerable to water contamination and/or supply issues outside their control.
7. **Water supply management.** Many participants anticipate the historical use of ground water for drinking water and other domestic/commercial uses will come under increasing supply pressure in certain areas of the state (e.g., the Treasure Valley). This will create the need to increasingly draw on surface water as a source for potable water. As this need materializes, certain participants indicated it will drive the need for new (potentially costly) treatment facilities and for further management of access to water in the context of existing water rights. In response, a range of participants identified the need to further explore and refine approaches to wastewater reuse, and one participant stressed the need to consider further surface water supply management in the form of an additional dam on the Boise River. One participant further observed they have seen the emergence of an interest in some communities to draw on surface waters currently flowing through agricultural conveyance systems to mitigate aquifer impacts associated with domestic consumption of ground water. Depending

on the location of mitigation efforts, this can raise concerns for agricultural conveyance owners/operators who require certain water volumes and flows to assure water can be delivered throughout their systems, including the tail end. Diversion of water away from or out of the agricultural conveyance system could reduce volume and flow to the point where water can't reach tail end customers.

8. ***Cultural Change.*** Certain participants indicated that there is a prevalent misconception that, because of the conversion of agricultural land to urban use in many parts of the state, there is less demand for irrigation and other non-potable use water. To the contrary, these participants indicated that demand for residential and commercial non-potable water use (including landscape irrigation) emerges with these new land uses. As a result, demand for agricultural conveyance water is not decreasing nor is it becoming more available for alternative uses. A further aspect of this discussion pointed out the “not-for-profit” nature of agricultural conveyance systems enabling their ability to provide and maintain affordable water provision services.
9. ***Competitive disadvantage in the provision of water services.*** Certain participants expressed concern about the ability of agricultural conveyance owners/operators to compete on an equitable basis with other water service providers. Agricultural conveyance owners/operators indicated they have long provided cost-effective, non-potable water for agricultural uses and, as agricultural land conversion to urban uses has taken place, to residential and commercial users. At the same time, a higher priority has been placed on domestic water provision than on agricultural uses. In this context, as land use conversion results in more residential and commercial customers and municipal water systems provide water service that can include the use of potable water for landscape irrigation and other non-drinking water uses, a potential water supply allocation disadvantage can emerge for agricultural conveyance system owner/operators. Agricultural conveyance owners/operators also lack the ability to expand their service areas in response to demand for additional services, while municipal water service providers, in the context of municipal annexations, can increase customer base, creating a disadvantage from a customer service standpoint as well. Overall, this leaves agricultural owner/operators concerned that they may lose overall footing in their efforts to continue to provide services to both agricultural and residential/commercial customers as the nature of the market for their services diversifies from strictly or primarily irrigated agriculture.

1.2 Potential Benefits of Furthering Regional Approaches

In the context of the identified challenges, session participants identified both existing benefits (derived from current regional approach efforts) and potential future benefits (from the expansion/refinement of such approaches in the future). Overall, participants did believe that regional approaches, in many cases, are an appropriate response to the challenges facing drinking water and sanitary sewer providers. This is particularly true for smaller jurisdictions where the costs and technical demands of increased capacity and treatment needs pose particularly difficult challenges. The potential benefits of regional approaches are synthesized below.

1. ***Economies of scale.*** Regional approaches present an opportunity to share the cost burden of building facilities as well as operating and managing them. Sharing assets can increase capacity and enhance the borrowing leverage of small communities.
2. ***Enhanced aquifer protection.*** Jurisdictional coordination can help protect sensitive aquifers through: creation of minimum standards for unincorporated development creating compatibility with centralized systems for future connection; enhancement of oversight for existing and newly developed decentralized systems to avoid aquifer contamination; implementation of joint plans to channel development into a pattern that is conducive to future centralized system use; and expansion of water delivery and supply capacity.
3. ***Optimization of technical skill sets and knowledge.*** The need to operate increasingly technically sophisticated treatment systems has driven the need for more highly trained utility operations staff. This new demand is occurring in the context of a utility workforce environment that finds it increasingly difficult to attract and retain qualified personnel (this is a challenge for the industry throughout the country). Regional approaches allow jurisdictions to share (and in effect optimize) this limited professional resource.
4. ***Enforcement efficiency.*** Uniform governance would enable managers to create uniform standards thereby streamlining the compliance enforcement process.

1.3 Challenges to Regional Approaches

After discussion of drinking water and sanitary sewer provision challenges and the potential benefits of furthering the use of regional approaches, session participants were asked to identify the barriers to adoption of regional approaches. Two very consistent themes emerged from these discussions: the pattern and nature of development in unincorporated areas is often partially to wholly incompatible with regionalized drinking water and sanitary sewer provision; and the desire to maintain jurisdictional autonomy regularly outweighs the potential benefits of participating in regional approaches involving shared capacity and governance. A synthesis of participant observations follows below.

1. ***Pattern and nature of development in unincorporated areas.*** Many participants indicated that, in unincorporated areas, there is significant pressure for “decentralized, patchwork” development that is poorly placed for and not conducive to (later) connection to more centralized utility services. Developers seeking to minimize short-term costs are tending to turn to use of “package plants” and/or on-site septic systems for wastewater management. The decentralized systems are often not established with compatibility for potential later connection to more centralized systems in mind (e.g., they do not follow construction standards compatible with local municipal systems and/or development locations preclude economic connector conveyance use). On the water provision side, Developers are tending to use individual wells (or very small community systems—fewer than 10 hook ups) for provision of water services. Participants indicated several factors influence this decision: drinking water system regulations create an economic incentive to use highly decentralized water provision techniques (single wells and very small community systems fall below

certain drinking water regulatory requirements); the upfront expense of providing access to a centralized treatment and distribution system; and the distributed geographic pattern of the development. A further challenge posed by development in unincorporated areas can be the substantial distance separating developments from centralized sanitary sewer and drinking water services provided by area municipalities. This separation can make the economics of any future regional approaches very poor.

2. ***Jurisdictional autonomy.*** Session participants explained that decisions on how best to manage water and wastewater provision are most effectively carried out on a local, case-by-case basis. Individual communities are reluctant to give up their ability to control the pattern and pace of development within their jurisdictions, and can view regional approaches suspiciously in this context. Participants identified a fairly wide array of jurisdiction control areas potentially threatened by participating in regional approaches that involve sharing capacity. These include:
 - Communities may have differing basic priorities and may not wish to coordinate them;
 - Communities may have differing public financing philosophies—for example, some communities want to pay as they go, while others prefer (or at least are not hesitant) to utilize bonds;
 - Physical separation and/or topography may make it difficult to share resources in a practical manner;
 - Communities have an interest in maintaining a competitive edge in attracting development opportunities to a community (e.g., effective regional approaches require joint, long-range planning that requires communities to share potential future development opportunities)—communities may not be willing to share these opportunities with other local jurisdictions for fear of losing the opportunity;
 - In some communities, inertia, or the idea that things have been done a certain way for a long time and without significant positive or negative impacts identified in association with the current system, there's not a compelling reason to change; and
 - Different communities may have differences in opinion about appropriate service levels.
3. ***Development impact fees.*** There is a prevailing sense that growth should pay for growth instead of making existing customers fund projects such as building new drinking water and sanitary sewer connections to new developments or supplying capacity. How, when, and if development impact fees are collected in unincorporated areas is central to the issue. In addition, a portion of the expansion communities may need to plan for can reside outside of their existing jurisdictional boundaries. This creates, at minimum, awkwardness when conducting long-term capital planning (they are including in their plans other jurisdictions that may or may not like the idea of potential future incorporation), and make it difficult to float bonds that will in part depend on future, successful annexations.
4. ***Unequal partnerships.*** Participants expressed concern that management partnerships between jurisdictions of different sizes could result in an unequal allocation of shared resources. For example, money might go to the larger entity because it is deemed to have a more pressing problem due to having a larger population. This ultimately results in the small community not benefiting from the shared arrangement.

5. ***Compliance and tracking.*** There is significant concern that if resources are shared, there will be discrepancies in the compliance and tracking that is done by different entities. For example, different counties may have different construction and monitoring requirements for stormwater best management practices.
6. ***Adding of another layer of government/bureaucracy.*** Session participants expressed concern that regional approaches can be seen as adding another layer of bureaucracy, with all of its associated costs, onto an already complicated system. Listening session participants believed that the public favors consolidation of government over the creation of new entities.

1.4 State Role

Given the many challenges associated with regionalization of drinking water and sanitary sewer services, listening session participants asserted that there generally needs to be a very compelling reason to implement a regional approach such as a high concern of water quality non-compliance (e.g., inability of small community systems to meet more stringent limits), clear demonstration that the costs of individual systems will be significantly higher than a regionalized system, substantial water supply management issues in the context of a shared water source among separate local jurisdictions, and/or concern for or the reality of aquifer contamination as a result of poor oversight/management of decentralized systems. For example, Southeastern Idaho communities are feeling significant sanitary sewer related drivers and, therefore, are looking seriously at various regional approaches. The drivers, however, for pursuing regional approaches to drinking water are not as strong. All of this is then further complicated by the pattern of new, unincorporated development, which both sets up potential long term problems, and simultaneously increases the challenges for future regional approaches through a lack of standards and patchwork development incompatible with regionalization. Session participants, in this context, did identify several opportunities for increasing the attractiveness of adopting regional approaches.

1. ***Model joint ownership agreements.*** Many listening session participants stressed the importance of effectively written joint ownership agreements that can help address many of the autonomy concerns expressed during the listening sessions. Session participants indicated that substantial experience exists within Idaho and throughout the country to use as a basis for creating model agreements that could help communities jump start regional efforts, as well as better assure regional approaches would avoid problems from the outset. Participants indicated such agreements need to, at a minimum, clearly cover three topics:
 - a. ownership;
 - b. operations and management; and
 - c. capital aspects of joint efforts.

Experience further indicates the importance of clear agreements relating to the operation, maintenance, and influent quality of the individual collection systems to ensure proper treatment plant operation and an equitable distribution of costs among participants in the joint effort. For example, participants discussed differences in “I and I” (Infiltration and Inflow) management within individual collection systems and the impact on treatment plant peak capacity needs. In the absence of clear agreement on collection system operational

parameters, the regional agreement may have limited ability to require I and I control within individual collection systems, allowing the systems to have a significant differential impact on treatment plant operations and capacity needs. In one particular case cited during discussions, regional treatment charges back to the individual jurisdictions are based on hookups not flow, thus blunting any economic incentive for I and I control. An additional example related to the stringency and enforcement presence of wastewater pre-treatment programs. Differences among collection system owner/operators can lead to differential requirements and impacts at the wastewater treatment plant that may not be reflected in how the individual collection system operators are required to support the plant.

2. ***Sovereign jurisdiction management.*** A few participants indicated that several communities around the state must work, in a regional context, with sovereign jurisdictions, such as neighboring states and local tribes. These communities believe there is a potential state role in helping local communities reach agreements on shared service provision, enforceable discharge limits, and long-term capital funding.
3. ***Influencing development in unincorporated areas.*** Many listening session participants identified the type and pattern of development in unincorporated areas as a major challenge to providing drinking water and sanitary sewer services and a stumbling block for future regional efforts. In this context, certain participants advocated for state enabled requirements that, at minimum, would ensure drinking water and sanitary sewer infrastructure is built using standards consistent with potential future incorporation into larger municipal/regional systems, ensure proper long-term maintenance of decentralized systems to avoid, in particular, water quality impacts, and ensure the patter of development is conducive to future regional efforts. One participant specifically suggested a single, narrow change to local development approval processes: the requirement to have an approved long-term maintenance and financial viability plan for all decentralized drinking water and sanitary sewer infrastructure.
4. ***Pilot efforts.*** Certain participants indicated that providing examples of successful approaches (e.g., a state-sponsored pilot project with stakeholders working together) would be a powerful way to garner support for regional approaches. Further, participants believe that the state could be more active in terms of educating the general public about water use issues.
5. ***Competitive playing field.*** Certain participants also indicated the state should take a role in examining the playing field on which various owners and operators of drinking water services operate, and ensure state law and policy does not unreasonably favor one over the other.
6. ***Creation of a core group.*** Several participants believed the creation of core, regional working groups, facilitated by the state, operating within a partnership framework focused on establishing and maintaining uniform standards and sharing information could greatly increase efficiency in providing drinking water and sanitary sewer services. Listening session participants explained that current drinking water and sanitary sewer services have been following individual land use decisions. Regional working groups could help to identify benefits of more pre-development coordination and establish and encourage the use of practices that more effectively support regional efforts.

7. ***Development of a master/regional drinking water and sanitary sewer plan.*** Several participants indicated a sense of need for formalized regional planning efforts to address the identified challenges and believed such planning efforts would require state legislative backing. These participants believed a jointly developed plan, containing agreements about drinking water and sanitary sewer needs and desired management strategies could allow drinking water and sanitary sewer managers to achieve economies of scale by consolidating resources, provide greater levels of service, and share technical expertise.
8. ***Creation of financial incentive to providing regional drinking water or sanitary sewer services.*** The state should investigate the possibility of reducing SRF interest rates for Regional Authorities providing either drinking water or sanitary sewer services. The basis for determining a reduced interest rate for regional projects will need to be balanced with long term SRF fund capitalization. The possibility exists for the State to offer a reduced interest rate for regional projects without having a dramatic effect on projected loan repayment balances.

Topic 2: Stormwater and Drainage Management

During the stormwater and drainage management portion of the listening sessions, participants were asked to identify key challenges faced by jurisdictions in providing stormwater and drainage management; methods and approaches that have been used by other jurisdictions, or could be used in the future to address those challenges; and whether there is a regional aspect to any of the methods and approaches. They were further asked to describe whether there is a role the State can play in supporting solutions to the identified challenges.

Based on participants' responses, the stormwater and drainage management portion of this report has been divided into three sections: challenges associated with providing stormwater and drainage management; possible methods and approaches that could be used to address those challenges; and what the potential State role could be.

2.1 Stormwater and Drainage Management Challenges

Across the listening sessions, a high degree of overlap existed among the identified stormwater and drainage management challenges. Two overarching categories of challenges emerged. First, participants identified acquiring the institutional capacity necessary to establish explicit stormwater management programs consistent with existing and emergent Clean Water Act requirements in the form of the NPDES permits and Water Quality Standards as a key, overarching challenge. Second, participants indicated that facilitating effective integration of urban and suburban drainage needs and systems with agricultural irrigation drainage needs and systems has been complex, with substantial work remaining to sort out appropriate roles, responsibilities, liabilities, and financing among jurisdictions. Specific challenges have been organized into one of these two overarching categories.

2.1.1 Institutional Capacity

1. **Lack of regulatory clarity.** Participants indicated that there is substantial uncertainty on the part of stormwater and drainage managers about the intent of MS4 permits, the TMDL requirements in the context of Municipal Separate Storm Sewer Systems (MS4) requirements, what constitutes the basis for meeting the six minimum controls requirement, and how a community can establish objective measures of stormwater quality improvement.
2. **Urban area boundary definition under the Clean Water Act.** The definition of urban area boundaries for purposes of stormwater regulation is currently based on Census data which, according to participants, can be significantly detached from on-the-ground reality. Drainage boundaries often do not follow jurisdictional boundaries, and listening session participants expressed a need for more local input and flexibility in the urban boundary definition process.
3. **Lack of sufficient local institutional capacity.** In many communities, prior to the emergence of MS4 requirements, stormwater management has been addressed as part of local street department activities, with funding provided through general funds. MS4 requirements are driving significant additional programmatic, staffing, and capital outlay needs that can be incompatible with existing street department authorities, staffing, and funding levels. Participants indicated that efforts to form separate stormwater utilities with the needed authorities and funding mechanisms have been met with mixed success in part because community residents are unaware of the intent and need for enhanced management and are thus reluctant to support increased funding and an expansion of local government activity. Lack of support for proactive stormwater management has led some communities into a “management by crisis” approach. Rural communities often have limited technical capabilities and insufficient resources to meet reporting requirements. In addition, some highway districts are owner/operators of storm water/drainage systems and are thus required to have NPDES storm water permits. Under Idaho law, highway districts do not have the authorities required of storm water permit holders. Some districts in Idaho have been successful partnering with local jurisdictions to meet the requirements, but the counties and cities may not be required to participate.
4. **Overlapping jurisdictional relationships.** Multiple jurisdictions are frequently covered under one MS4 permit. Co-permittees often find it difficult to coordinate activities, and as a result, stormwater permits can lack cohesion, making it difficult to determine management and funding responsibilities. Co-permittees have substantial difficulty coordinating activities, ultimately creating gaps in management. This challenge is exacerbated by the interface between agricultural and urban irrigation/drainage systems which can have different goals, objectives, and policies.
5. **Vector control.** Retention basins are a common method for stormwater management in response to new MS4 requirements. Under certain management conditions, retention basins will retain standing water, creating a breeding ground for mosquitoes. Certain participants

indicated that, with the emergence of West Nile Virus as a health concern, this potential for creating new and uncontrolled mosquito breeding habitat, raises public health concerns.

6. ***Shallow injection well impacts.*** Participants indicated that one technique for on-site management of stormwater is the use of shallow injection wells. This technique raises concerns for contamination of shallow aquifers in certain locations throughout Idaho.
7. ***EPA primacy.*** Several participants indicated challenges establishing CWA applicability and interpretations appropriate to local conditions in Idaho within the context of EPA primacy for NPDES regulatory activity within the state. They indicated a desire for the State of Idaho to take NPDES primacy in the future.

2.1.2 Agricultural Interface with Urban and Suburban Uses

1. ***Maintaining Clean Water Act exemption.*** Co-mingled agricultural water and urban stormwater threatens the Clean Water Act exemption currently in place for agricultural conveyances. Although work is underway to clarify CWA applicability to conveyances carrying co-mingled water, according to certain participants, EPA has not yet provided guidance sufficiently specific to alleviate current concerns about the agricultural exemption. New MS4 requirements have heightened the already existing sensitivity regarding the exemption, focusing considerable attention on Clean Water Act regulatory liability for stormwater discharges. In the context of this sensitivity, agricultural conveyance system owners/operators around the state have taken a range of approaches to accepting urban/suburban runoff into their systems. Some have historically accepted/accommodated urban drainage, some have re-evaluated their relationship to urban run off and are in the process of imposing a more restrictive relationship, while others have not and do not intend under current conditions to accept urban run off. This creates inconsistency in the access and stormwater management options municipal and transportation entities around the state have available.
2. ***Flood liability exposure.*** Allowing stormwater into agricultural conveyances raises significant concerns about heightening flood risks by introducing short-term, high volume flows into the system. Agricultural conveyance managers are required to manage, and hold liability for, the water flowing through their systems by state law. Acceptance or unauthorized discharges of stormwater to the conveyances raises flooding risk and results in increased liability exposure for owners/operators. This potential problem is exacerbated by the design of the conveyances which both deliver irrigation water (and become narrower in the process) and drain agricultural lands (becoming wider in the process). Stormwater entering the delivery portion of the conveyance system can create substantial flooding risk.
3. ***Conveyance maintenance difficulties.*** Agricultural owners/operators have established a regular rhythm of annual maintenance activities, with major maintenance scheduled for the non-irrigation season (mid-October through mid-April) when conveyances are not used to provide irrigation water and, as a result, hold little or no water. Stormwater discharges can cause conveyances to be wet year round complicating the ability of owners to work in, and

therefore maintain, the conveyances for their proper use. Stormwater also places a “24-7” operational requirement on the conveyances. For example, the accumulation of snow in agricultural conveyances used for stormwater management can create flooding risk. This drives an increased need for snow removal maintenance beyond that required for strictly managing agricultural water. In addition, the velocity of stormwater (and, therefore, its erosion potential) can be greater than that of agricultural drainage, increasing the potential for wear and tear on agricultural conveyances.

4. ***Quality of delivered water.*** The historical purpose of agricultural conveyances is to provide irrigation water to lands in agricultural use. The quality of the delivered water must remain consistent with that intended purpose. Urban runoff is known to contain a variety of contaminants (e.g., motor oil) not otherwise typically present in agricultural irrigation water. Co-mingled water, as a result, raises concerns for agricultural irrigation operations.
5. ***Lack of enforcement capabilities.*** Agricultural conveyance owners/operators do not possess the funding, staffing, or underlying legal authorities necessary to prevent illegal stormwater discharges into agricultural systems or to act in the context of CWA stormwater management requirements as a regulating entity.
6. ***Complex infrastructure and jurisdictional responsibility.*** The agricultural and urban drainage management systems are complicated and intertwined, and have different goals, objectives, and policies. This makes it difficult to determine responsibility for facilitating coordination and filling management gaps, particularly pertaining to multi-party drain use, maintenance and repair, and flood/emergency management response and liability.
7. ***Access to cost effective drainage ways.*** In many parts of Idaho, much of the current drainage infrastructure predates urban/suburban development and was designed for irrigated agricultural runoff. This existing infrastructure made effective use of natural drainage channels and other terrain advantages to move water efficiently. As land use conversion has taken place, and as certain agricultural conveyances owner/operators have raised concerns regarding receiving urban drainage, urban drainage managers have been required to develop less than optimal (and, at times, more costly) drainage solutions (as natural drainage ways are already in use and dedicated to agricultural conveyances).
8. ***Aquifer recharge.*** Various changes in land use and water management practices are changing the dynamics of ground water recharge. Listening session participants indicated that, historically, (unlined) agricultural conveyances and techniques such as flood irrigation have been substantial (approximately 60-90 percent) contributors to local ground water recharge. The conversion of agricultural lands to urban development is substantially increasing impervious surface thereby reducing infiltration and associated recharge. Additionally, owners/operators of agricultural conveyances, in the interest of water conservation, have been maintaining/lining canals and fixing leaks, while farmers have been changing to lower water use irrigation methods such as sprinkler irrigation systems. Both activities ultimately lead to less water available for ground water recharge. These changes highlight the need for explicit conjunctive management of surface and ground water.

Participants acknowledged that the state is working on a recharge program that holds potential for addressing these concerns.

9. ***Persistent jurisdictional hurdles for innovative solutions.*** Several jurisdictional hurdles were identified as significant challenges in the context of stormwater management. Examples included differences of opinion on who owns/controls stormwater, differences in the water quality requirements imposed on different sources of water, and the challenges associated with changing the status of existing drainage districts (e.g., disbanding) when land use changes fundamentally alter the district's purpose.
10. ***Lack of a comprehensive long range plan.*** Existing stormwater and drainage management entities have limitations to what they can legally accomplish individually. Listening session participants identified the lack of comprehensive long range planning as a key challenge. Current planning gaps identified include a lack of a big picture, or basin wide planning perspective, the limited ability of individual entities to accurately measure growth impacts, and a lack of up-to-date flood plain analyses. Participants said there is a need for a mechanism to fill institutional and management gaps, and a need for a vested interest by all parties in jointly solving problems.
11. ***Cultural changes.*** Listening session participants identified a need to highlight the shared nature of the challenges associated with stormwater management, and to create a dialogue about the future coexistence of urban development and agricultural uses of land and associated stormwater/drainage management. Some participants indicated a key stumbling block is the perspective held by some that agriculture is the old paradigm in the process of replacement by urbanization. Further, as communities have developed, demographics have changed and local political leaders do not necessarily have a good working understanding of agricultural conveyance systems, or stormwater and drainage issues in general.
12. ***Lack of education.*** Listening session participants identified a lack of understanding about stormwater/drainage management challenges on the part of the general public as problematic. Participants believed the public also needs education on jurisdictional rights, ownership, and maintenance of agricultural conveyance systems. For example, participants indicated there is a prevalent public perspective that agricultural conveyances are available for public purposes. Examples include requests for recreational easements, assumptions that use for urban drainage should be allowed, and concerns regarding maintenance activities (such as tree thinning) that are perceived to affect aesthetics. This creates pressure on the managers of such systems and demonstrates a clear need for heightening recognition about the intended use of these systems.

2.2 Methods and Approaches

Listening session participants were asked to identify potential methods and approaches that could be utilized to address new stormwater management requirements, and challenges associated with the complicated interface between agricultural and urban/suburban drainage needs. Participants

were further asked if there are any regional aspects of the potential methods and approaches. The following items summarize their thoughts.

1. ***Formation of a basin-wide management entity.*** Listening session participants identified the formation of a regional or basin-wide umbrella management entity as a potential approach to better stormwater/drainage management. Participants indicated that the entity would need to have a master agreement among jurisdictions, and sufficient authority to influence development decisions that aren't consistent with basin-wide needs, to develop a funding mechanism or fee to compensate water conveyance owners/operators and allow them to maintain their systems and invest in capital projects, to assume drainage management liability, to prevent development in the absence of an approved drainage plan, and to determine a path forward that meets the needs of all parties. Participants indicated that the entity's efforts could be supplemented by the development of a "best management practices" guide for use by all individual jurisdictions participating in the basin-wide approach. This approach would add value by requiring that best management practices are followed to ensure uniform and consistent treatment of stormwater.
2. ***Education.*** Participants indicated a general lack of understanding of historical drainage management and new stormwater requirements and needs have hindered efforts to develop collaborative solutions. There is a need to create a common language as a community which can support more productive and informed dialog. Examples of information that could be shared include a general overview of what stormwater actually is, how drainage systems work, the roles individuals play in the system, applicable regulatory processes, and system ownership, operator, and financial needs.
3. ***Tailored, state-wide guidance.*** Several participants, particularly those from small and medium size communities have found it difficult to interpret MS4 requirements and develop programs in response. These participants indicated they are aware that certain states have prepared and continue to support the provision of state-specific stormwater management guidance documents. Additionally, participants indicated examples of states that support a range of web-based guidance resources for use by communities as they develop programs in response to MS4 requirements. They believed it would be helpful for the State of Idaho to undertake a similar assistance role.
4. ***Sharing of national experience.*** Session participants recognize that other areas of the U.S. have addressed similar challenges regarding stormwater management. Rather than reinventing the wheel time and again, a state-wide forum for sharing knowledge and information could be created. The similarity of challenges indicated by different regions of the state during the listening sessions further reinforces the potential utility of a statewide forum where stormwater/drainage managers from around the state can share experiences, knowledge, challenges, and suggestions for solutions.
5. ***Integration of stormwater/drainage management planning with pre-development.*** Many listening session participants identified proper long-term maintenance as an important aspect of well-functioning stormwater management structures (e.g., sediment basins). In this context, certain participants believed there is a need to utilize county-approved pre-

development agreements that not just require installation of structures, but also their maintenance. Certain participants further observed that an opportunity exists to take advantage of “new approaches” and indicated there is an opportunity to view stormwater as an amenity. To support these approaches, participants anticipated EPA’s and/or DEQ’s expertise would be needed and indicated a compilation of available, proven solution options tied to specific environmental conditions would be very helpful. In addition, some agricultural conveyance system owner/operators currently accept urban drainage into their systems, and their experience indicates the need for care with respect to the needed contractual arrangements. Important aspects of these agreements include prior consultation/approval of development plans to ensure consistency with agricultural conveyance needs/requirements, use of established guidance on best management practices to ensure proper management actions, and clarity on funding needs (e.g., for enhanced maintenance) and mechanisms.

6. ***Wastewater reuse and recharge initiatives.*** Listening session participants indicated the need for explicit focus on opportunities for further use of treated stormwater for ground water recharge. This approach was seen as critical to addressing potential ground water supply constraints as more historical sources of recharge are changing.
7. ***Impact fee use.*** Providing support for a basin-wide drainage management entity, according to some participants, should come from development impact fees, rather than a tax or other fee applied to all residents. This funding approach preference is derived from a belief that new development needs to fully pay for the infrastructure and other costs created in communities.

2.3 State Role

Listening session participants were asked to explore whether they see a specific role for the State to play to support the potential methods and approaches to address stormwater and drainage management challenges that were discussed. Many of the ideas documented emerged in the context of an expressed interest in enabling some type of regional entities to provide general oversight, coordination, and management of stormwater and drainage resources. Participants indicated a sense that developing such entities around the state could leverage existing government organizations, thereby avoiding creating an additional layer of bureaucracy.

Four key ideas emerged out of the eight listening sessions. First, creating enabling legislation, second, providing support for regional forums, third drafting MS4 guidance materials and creating a centralized repository to house them, and fourth hosting a statewide workshop for stormwater and drainage managers. These ideas are elaborated further in the following section.

1. ***Create enabling legislation.*** Several listening session participants indicated that a regional or watershed-wide approach to stormwater and drainage management will not be possible without a legislative mandate. Participants expressed a need for the creation of a new managing entity, separate from any existing state departments to avoid perceived or actual conflict of interest associated with them. The watershed-wide entity should be enabled by the

State, but run by locals, and should include a broad approach to comprehensive planning to avoid duplication of efforts, and adequate funding in its charge. It would need to have the necessary funding and authority to leverage successful jurisdictional approaches that have been used.

2. ***Support regional forums.*** Participants suggested that the State could take an active role in creating a neutral forum to allow different interest groups to share knowledge and information about how individual entity actions may benefit another group, and communicate potential solutions. The forum would need to facilitate collaboration and allow all members to share knowledge and expertise, and provide education. Participants indicated hope that the forum could ultimately facilitate the creation and/or communication of a common language, agreed upon as a group, to share understanding with the planning community and the general public.
3. ***Provide guidance documents.*** Participants, particularly those from small to mid-size communities, expressed a need for tailored, state-wide guidance documents to help them interpret MS4 requirements and develop their programs accordingly. They believe the State of Idaho could draft such documents, and create a centralized repository (potentially web-enabled) to house them. Specific examples of potential guidance documents include: Information documents on stormwater management process standardization, a best management practices manual and general process guidance.
4. ***Host a statewide workshop.*** Listening session participants indicated that the State could host or facilitate a statewide workshop (or workshops) to refine understanding about stormwater and drainage management, as well as entertain information from national experts who have addressed some of the challenges faced by Idaho stormwater and drainage managers in similar situations.

Potential Paths Forward

A high degree of consistency emerged from the listening sessions regarding challenges and associated needs related to drinking water, sanitary sewer, and stormwater/drainage management across the state. This consistency suggests an opportunity for state action to assist local communities throughout the state more efficiently and effectively address the challenges they face. In this context, it is important to point out that many participants did indicate a reasonable degree of comfort with the degree and pace of the adoption of regional approaches to drinking water and sanitary sewer services, even as they saw some specific opportunities for a state role and viewed regional approaches as well suited to address many of the identified drinking water and sanitary sewer challenges. Looking across listening session discussions five areas emerge as strong candidates for further consideration for state-level action.

1. ***Pattern and type of development in unincorporated areas.*** A very consistent theme across all listening sessions was concern for the potential environmental impacts and water supply consequences associated with development in unincorporated areas. Participants consistently identified the type and pattern of development in unincorporated areas – including the use of

decentralized service provision approaches that may be subject to less maintenance stringency – as an area of major concern from environmental impact, water supply management, and conduciveness to future regionalization perspectives. At the same time, participants recognized the high degree of sensitivity that exists regarding local control of development patterns. This sensitivity points to the need to approach any effort of a very targeted basis, with a focus on better ensuring the long-term maintenance of decentralized systems and looking to better enable future, centralized system connection.

2. ***Stormwater/drainage management institutional capacity.*** Throughout the state, listening session participants indicated they are struggling with developing the institutional capacity (program structure, governance, authorities, and funding) to address new MS4 requirements and address drainage in general as population increases. Many participants recognized that substantial work has been done throughout the country on these issues, and there is a strong interest in drawing on those lessons learned to help local Idaho communities avoid reinventing the wheel and address their challenges more efficiently. In this context, participants suggested opportunities for the development of state guidance (on best management practices for and interpretation of CWA stormwater management requirements), the creation of a centralized source for information (such as a state-managed web service), and the concept of a state-wide workshop that would include outside experts presenting on options for addressing capacity challenges.
3. ***Agricultural/urban stormwater/drainage management interface.*** Another very consistent challenge identified during the listening sessions is the coordination and integration of urban drainage needs with the existing agricultural irrigation and drainage system. Significant legal, institutional, monetary, and operational obstacles remain in the way of effective drainage management in this context. Many participants, representing a diverse set of perspectives, stressed the importance of addressing these obstacles, with many believing there is a very important state role in doing so. In particular, there is a sense that some form or regional perspective (possibly planning, possibly institutional) needs to be in place to reconcile urban and agricultural interests and provide an institutional environment where roles are better defined, liability addressed, compensation for services provided for, and operations and infrastructure properly supported. Certain participants believed this support will not emerge in the absence of state enabling legislation. There may also be an opportunity in the state-wide workshop (mentioned above) to bring in the experiences of other parts of the country to help inform Idaho communities of possible approaches to address this challenge.
4. ***Facilitated voluntary or structured basin wide planning.*** In both the context of drinking water/sanitary sewer service provision and stormwater/drainage management, many listening session participants indicated a need for better, overall regional coordination/integration among individual jurisdictions sharing water resources within basins. The needs focused on the ability to protect sensitive aquifers, manage water supply, effectively plan for water and wastewater treatment capacity, share natural and man-made drainage ways, and define joint operational, maintenance, and emergency response roles and responsibilities. Participants had a range of ideas for enabling what they consistently saw as the critical need for better coordination and integration. These included:

(on the lighter touch side):

- state-facilitated regional coordination groups; and
- voluntary or state required basin-wide planning.

(on the heavier touch side, and particularly focused on stormwater/drainage management):

- state enabled regional organizations charged with establishing a master agreement among jurisdictions;
- sufficient authority to influence land use planning decisions that are not consistent with basin-wide stormwater and drainage management needs; and
- development of a funding mechanism or fee to compensate water conveyance owners/operators and allow them to maintain their systems and invest in capital projects, to assume drainage management liability, and to prevent development in the absence of an approved drainage plan.

5. ***Capital funding.*** Communities are under substantial pressure to obtain capital funds for drinking water, wastewater, and stormwater management in response to new requirements (such as TMDLs and MS4 permits), expanding population, and aging infrastructure. Communities are feeling squeezed and believe they face very constrained options for meeting capital investment needs as a result of a variety of factors: limited SRF funds; the administrative hurdles associated with obtaining the SRF funds; and constraints on bonding imposed by recent court decisions and Idaho state law. Certain participants believed there is a need to take a comprehensive look at current capital funding constraints in an effort to identify improvements that can be made to local community capacity for funding needed drinking water, sanitary sewer, and stormwater/drainage capital projects.

Appendices

Appendix A

Coeur d’Alene Utilities Listening Session Summary

Oct. 30, 2006, 8:30 am – 12:00 pm

Background

The Idaho Department of Environmental Quality, under the direction of the joint legislative Environmental Common Sense Committee, has conducted a series of listening sessions to document the perspectives of different constituencies statewide on the topics of regional aspects of water and sewer services, and stormwater and drainage management. Participants were asked questions about the challenges faced, current approaches to addressing those challenges, possible future solutions, and what role, if any, the state could play, in the context of the two subject areas. The listening sessions were held in Coeur d’Alene, Pocatello, and Boise, and divided into three interest areas: Agricultural interests, utilities interests, and other government interests. In Coeur d’Alene only a utilities interests meeting was held due to the lack of a significant irrigated agricultural presence in the Idaho panhandle, and lack of availability for participation in the government session. Three meetings were held in both Pocatello and Boise. Separate sessions for each interest area were conducted to allow for an in-depth exploration of the topic areas from the individual perspectives.

This document contains information gathered during the Coeur d’Alene utilities interests listening session on October 30, 2006 from 8:30 am – 12:00 pm. The information gathered during the session has been used to produce a thematic summary that will ultimately be rolled into a report, along with the other listening session summaries, and given to the Idaho State Legislature. The information gathered will not be used to inform any policy decisions or create a basis for recommendations.

Topic 1: Overarching Challenges

According to discussions at the session, the communities of Northern Idaho are coming under increasing pressure to provide high levels of water and wastewater services in the context of a rapidly growing population. Listening session participants were asked to identify key overarching challenges their jurisdictions face in the provision of water and sanitary sewer services. The following list summarizes their thoughts.

1. ***Decentralized Water and Sewer Service Development in Unincorporated Areas.*** In unincorporated areas, there is significant pressure for “decentralized” development. Developers seeking to minimize short-term costs are tending to turn to use of “package plants” and/or on-site septic systems for sanitary waste management. The decentralized

systems are often not established with compatibility for potential later connection to more centralized systems in mind (e.g., they do not utilize construction standards compatible with local municipal systems and/or development locations for a “patchwork” which hinders future, cost-effective connection to available centralized systems. Additionally, participants indicated that Counties have only limited oversight ability on these systems, generating concerns that, over time, system performance will degrade, creating the potential for environmental impacts to ground and surface waters. Developers are also tending to use individual wells for provision of water services. Drinking water system regulations create an economic incentive to use highly decentralized water provision techniques (e.g., individual wells). An increase in the number of individual wells makes overall community water supply management more difficult and increases groundwater contamination risks.

2. ***New Water and Sewer Capacity Demands in Incorporated Areas.*** In incorporated areas, growth is driving the need for capacity expansion of water and sewer systems, heightening the associated pressure on capital funding requirements and local water and sewer rate affordability.
3. ***New limits.*** New discharge requirements (primarily due to TMDL implementation and other new standards) are driving expanded capacity needs and are changing the nature of the treatment that must take place. This leads to an increase in the need for sanitary sewer systems of greater technical sophistication.
4. ***Water supply demands.*** Much of Northern Idaho shares a common water supply, and the demand/supply equation will be under increasing pressure in the future. This pressure is driving the need to examine source water supply conditions more closely and evaluate new demands from additional growth in light of anticipated supply constraints. A key related concern is the water rights adjudication process currently under way for the area.
5. ***Aging infrastructure.*** Many water and wastewater systems are in need of updates and/or replacements to portions of their infrastructure such as treatment facilities, and collection and distribution systems. This need generates substantial capital funding pressures. This challenge is exacerbated by historical and current rate structures that are not fully consistent with the funding necessary to meet the updates and replacement needs in a timely manner.
6. ***Funding.*** Limited funding in the context of the four above-mentioned challenges is causing difficulties for many of water and wastewater managers.

Topic 2: Regional Approaches and Benefits in the Context of Identified Challenges

After highlighting the key challenges facing water and sewer provision managers, listening session participants identified regional approaches that have been utilized, or could be utilized in the future, to address those challenges, as well as key associated benefits. Substantial regional management approaches have already been implemented in Northern Idaho. For example, two cities and a county have created a joint powers agreement giving each of the major players a vote on the governing board. Individual participants in the agreement own/operate their collection systems, while they jointly share capacity at a single, regional treatment facility. Participants at

the session did anticipate further efforts to implement regional approaches, with a focus on sharing centralized treatment capacity, while maintaining operational and ownership control over collection systems within their jurisdictions.

Session participants did identify a series of benefits that they believed are, or could hypothetically be, realized through regional approaches to water and wastewater management. The following list summarizes their thoughts.

- ***Optimization of technical skill sets and knowledge.*** The need to operate increasingly technically sophisticated treatment systems has driven the need for more highly trained utility operations staff. This new demand is occurring in the context of a utility workforce environment that finds it increasingly difficult to attract and retain qualified personnel (this is a challenge for the industry throughout the country). Regional approaches allow jurisdictions to share (and in effect optimize) this limited professional resource.
- ***Economies of scale.*** Regional approaches present an opportunity to share the cost burden of building facilities as well as operating and managing them. Sharing assets can increase capacity and enhance the borrowing leverage of small communities.
- ***Enforcement efficiency.*** Uniform governance would enable managers to create uniform standards thereby streamlining the compliance enforcement process.

Topic 3: Challenges to Utilization of Regional Approaches

Listening session participants were asked to identify potential barriers to further adoption of regional approaches to water and sewer provision. Because Northern Idaho has had substantial experience with implementing regional approaches, participants were able to provide very concrete examples of challenges they have experienced. The primary concern identified was curtailment of jurisdictional autonomy. The following list identifies some of the reasons for apprehension about sharing control of water and sewer provision responsibility:

- Communities have an interest in maintaining control of the nature and rate of development within a community;
- Communities have an interest in maintaining control of the degree of governance over the nature of operations and management;
- Different communities may have differing basic priorities, and may not wish to coordinate them;
- Communities fear a loss of control over how resources will be deployed - for example, concern that one community will be required to pay for the needs of another community;
- Different communities may have differing public financing philosophies - for example, some communities want to pay as they go, while others prefer (or at least are not hesitant) to utilize bonds; and
- Different communities may fear coordination because it may change enforcement due to the varying ordinances found amongst different service providers (e.g., permit limits and pretreatment options).

Listening session participants stressed the importance of effectively written joint ownership agreements to address the identified challenges. These agreements need to, at minimum, clearly cover ownership, operations and management, and capital. As indicated through discussions, a common regionalization model utilized in Northern Idaho is a shared treatment plant serving individually owned and operated collection systems. Experience with this model has highlighted for the participants the importance of clear agreements relating to the operation, maintenance, and influent quality of the individual collection systems to ensure proper treatment plant operation and an equitable distribution of costs among participants in the joint effort. For example, participants discussed differences in I and I (Infiltration and Inflow) management within individual collection systems and the impact on treatment plant peak capacity needs. In the absence of clear agreement on collection system operational parameters, the regional agreement may have limited ability to require I and I control within individual collection systems, allowing the systems to have a significant differential impact on treatment plant operations and capacity needs. In this particular case, regional treatment charges back to the individual jurisdictions is based on hookups not flow, thus blunting any economic incentive for I and I control. An additional example related to the stringency and enforcement presence of pre-treatment programs. Differences among collection system owner/operators can lead to differential requirements and impacts at the treatment plant that may not be reflected in how the individual collection system operators are required to support the plant.

Participants also indicated that several communities in Northern Idaho must work with sovereign jurisdictions, such as neighboring states and local tribes, to provide services, and enforce discharge limits, and that there are substantial challenges associated with reconciling different limits, and securing funding for projects such as infrastructure replacement across them. There are often discrepancies between which jurisdiction controls infrastructure, and which jurisdiction has the funds necessary to complete projects. Further, Idaho has not been delegated primacy, which participants believe makes it more difficult to forge partnerships.

Closing Comments

The communities of Northern Idaho are experiencing rapid, though somewhat differential, growth which is causing significant strains on resources. Small but growing communities will increasingly need enhanced technical expertise. Communities that are growing together will be challenged to coordinate services. Participants contemplate the potential future need for more comprehensive long range planning to provide adequate levels of service in the future.

Appendix B

Pocatello Government Listening Session Summary ***October 31, 2006 1:00 – 4:30 pm***

Background

The Idaho Department of Environmental Quality, under the direction of the joint legislative Environmental Common Sense Committee, has conducted a series of listening sessions to document the perspectives of different constituencies statewide on the topics of regional aspects of water and sewer services, and stormwater and drainage management. Participants were asked questions about the challenges faced, current approaches to addressing those challenges, possible future solutions, and what role, if any, the state could play, in the context of the two subject areas. The listening sessions were held in Coeur d'Alene, Pocatello, and Boise, and divided into three interest areas: Agricultural interests, utilities interests, and other government interests. In Coeur d'Alene only a utilities interests meeting was held due to the lack of a significant irrigated agricultural presence in the Idaho panhandle, and lack of availability for participation in the government session. Three meetings were held in both Pocatello and Boise. Separate sessions for each interest area were conducted to allow for an in-depth exploration of the topic areas from the individual perspectives.

This document contains information gathered during the Pocatello Government Interests listening session on October 31, 2006 from 1:00 – 4:30 pm. The information gathered during the session has been used to produce a thematic summary that will ultimately be rolled into a report, along with the other listening session summaries, and given to the Idaho State Legislature. The information gathered will not be used to inform any policy decisions or create a basis for recommendations.

Topic 1 - Overarching Challenges

To begin the listening session, participants were asked to identify what they believe to be the key challenges faced by their jurisdictions in the provision of water and sewer services. The following list summarizes participants' thoughts.

- 7. *Development in unincorporated areas.*** In unincorporated areas, participants are seeing significant pressure for and a proliferation of “decentralized” development. Developers are responding to market demand for single family homes located outside of city areas while still located in sufficiently close proximity to larger towns to draw on their amenities. Developers seeking to minimize short-term costs are tending to turn to use of “package plants” and/or on-site septic systems for sanitary waste management. Listening session participants indicated significant concern over the long-term impacts of on-site septic systems on both the health of the aquifer, and human health. In this context, they identified the use of nutrient pathogen study requirements as a tool to screen development activity for potential impacts, while indicating the sense of need for and appropriateness of such studies remains mixed among local political leaders. A further challenge posed by development in unincorporated areas is the substantial distance separating developments from centralized sewer and water services

provided by area municipalities. This separation makes the economics of any future regional approaches very poor.

8. ***Drinking water provision.*** Developers are also tending to use individual wells (or very small community systems – fewer than 10 hook ups) for provision of water services. Participants indicated several factors influence this decision: drinking water system regulations create an economic incentive to use highly decentralized water provision techniques (single wells and very small community systems fall below certain drinking water regulatory requirements); the upfront expense of providing access to a centralized treatment and distribution system; and the distributed geographic pattern of the development. The high usage of individual wells makes overall community water supply management more difficult and increases contamination risks. These concerns are exacerbated by a sense that counties have limited oversight capability, while individual homeowners (that may lack sufficient technical knowledge) will be responsible for system management.
9. ***Septic pumping activity.*** The use of on-site septic systems for existing areas and new development in unincorporated areas also requires the management of stored material by septic pumping companies. Certain past practices associated with land application of material has raised concerns for environmental and public health impacts.
10. ***New water and sewer capacity demands in incorporated areas.*** In incorporated areas, growth is driving the need for capacity expansion of water and sewer systems, heightening the associated pressure on capital funding requirements and local water and sewer rate affordability.
11. ***Aging infrastructure.*** Many water and wastewater systems are in need of updates and/or replacements to sections of their infrastructure. In addition, session participants indicated that there are portions of incorporated areas that utilize individual septic systems which require sewerage.
12. ***Vector control.*** Retention basins are a common method for stormwater management in response to new MS4 requirements. Under certain management conditions, retention basins will retain standing water which provides a breeding ground for mosquitoes. With the emergence of West Nile Virus as a health concern, this potential for creating new and uncontrolled mosquito breeding habitat, raises public health concerns.

Regional Approaches and Benefits in the Context of Identified Challenges

Listening session participants identified two successful regional approaches that have already been implemented in Southeastern Idaho. One arrangement involves two cities sharing a treatment facility, but retaining independent collection systems. The other cooperative arrangement in place is a multi-county pumping agreement wherein a common fleet of collection system vehicles are used. Both systems have been fairly successful, and continue to have momentum. For example, the multi-county pumping arrangement faced significant challenges in the planning stage (e.g., defining the plan area), but is moving forward with a phased implementation approach.

Participants explained that further execution of regional approaches may be somewhat limited because of the substantial geographic separation of many communities in Southeastern Idaho.

Challenges to Utilization of Regional Approaches

Listening session participants were asked to consider what the potential barriers are to further adoption of regional approaches to water and sewer provision. Two primary concerns were identified.

- **Autonomy.** Session participants explained that decisions on how best to manage water and wastewater provision are most effectively carried out on a local, case-by-case basis. Individual communities do not want to give up their ability to control the pattern and pace of development within their jurisdictions.
- **Compliance and tracking.** There is significant concern that if resources are shared, there will be discrepancies in the compliance and tracking that is done by different entities. For example, different counties may have different monitoring requirements for stormwater injection wells.

State Role

Listening session participants indicated that there is a need to provide more consistency in the way septic systems and package plants are approached from jurisdiction to jurisdiction, with the primary driver being reducing environmental and public health concerns. At the same time, participants felt that developing the basis of a statewide approach would prove to be difficult for two reasons: First, participants indicated that there is a mixed sense of concern about the jurisdictional inconsistencies, and second, local jurisdictions feel strongly about retaining local control over the way their communities develop.

Key Stormwater Management Challenges

As rural communities grow and the interface between urban development and agricultural land increases, stormwater and drainage management challenges are becoming of greater importance. Listening session participants were asked to identify key challenges associated with stormwater and drainage management in the context of the NPDES MS4 requirements. The following list summarizes participants' thoughts:

- Conversion of agricultural land to urban use, and the potential for changes in infiltration effects on groundwater;
- Limited technical and administrative expertise regarding MS4 permit requirements;
- Limited funding capacity (e.g., for nutrient pathogen studies, etc.); and
- Difficulty determining on whom stormwater management responsibilities should fall.

Closing Comments

At the end of the listening session, participants were reminded of the purpose of the sessions, and the immediate path forward. Participants indicated comfort with the review cycle of the thematic summary, and expressed an interest in staying involved and having the opportunity to review the report encompassing all of the session summaries.

Appendix C

Pocatello Utilities Listening Session

Nov. 1, 2006 8:30 am – 12:00 pm

Background

The Idaho Department of Environmental Quality, under the direction of the joint legislative Environmental Common Sense Committee, has conducted a series of listening sessions to document the perspectives of different constituencies statewide on the topics of regional aspects of water and sewer services, and stormwater and drainage management. Participants were asked questions about the challenges faced, current approaches to addressing those challenges, possible future solutions, and what role, if any, the state could play, in the context of the two subject areas. The listening sessions were held in Coeur d'Alene, Pocatello, and Boise, and divided into three interest areas: Agricultural interests, utilities interests, and other government interests. In Coeur d'Alene only a utilities interests meeting was held due to the lack of a significant irrigated agricultural presence in the Idaho panhandle, and lack of availability for participation in the government session. Three meetings were held in both Pocatello and Boise. Separate sessions for each interest area were conducted to allow for an in-depth exploration of the topic areas from the individual perspectives.

This document contains information gathered during the Pocatello Utilities Interests listening session on November 1, 2006 from 8:30 am – 12:00 pm. The information gathered during the session has been used to produce a thematic summary that will ultimately be rolled into a report, along with the other listening session summaries, and given to the Idaho State Legislature. The information gathered will not be used to inform any policy decisions or create a basis for recommendations.

Topic 1 - Overarching Challenges

To begin the listening session, participants were asked to identify what they believe to be the key challenges faced by their jurisdictions in the provision of water and sewer services. The following list summarizes participants' thoughts.

13. ***Growth in Unincorporated Areas.*** In unincorporated areas, there is significant pressure for “decentralized, patchwork” development that is poorly placed and not conducive to connection to more centralized utility services. Developers seeking to minimize short-term costs are tending to turn to use of “package plants” and/or on-site septic systems for sanitary waste management. The decentralized systems are often not established with compatibility for potential later connection to more centralized systems in mind (e.g., they do not follow construction standards compatible with local municipal systems and/or development locations preclude economic connector conveyance use). Counties have only limited oversight ability on these systems, and there is concern that over time system performance will degrade, causing environmental damage. Developers are also tending to use individual wells for provision of water services. Drinking water system regulations create an economic incentive to use highly decentralized water provision techniques (e.g., individual wells). An increase in

the number of individual wells makes overall community water supply management more difficult and increases contamination risks.

14. ***New Water and Sewer Capacity Demands in Incorporated Areas.*** In incorporated areas, growth is driving the need for capacity expansion of water and sewer systems, heightening the associated pressure on capital funding requirements and local water and sewer rate affordability.
15. ***New limits.*** New discharge requirements due to TMDL implementation and other standards are requiring expanded capacity and are changing the nature of the treatment that must take place. This leads to an increase in the need for systems of greater technical sophistication.
16. ***Aquifer Protection.*** Many residents of Southeastern Idaho share common water supplies that, in places, come very close to the surface. The key concern with living on top of the aquifer is water supply contamination. Certain, and possibly many, jurisdictions depend on water supplies, the recharge for which resides outside of their areas of influence. This leaves these jurisdictions vulnerable to water contamination and/or supply issues outside their control.
17. ***Aging infrastructure.*** Many water and wastewater systems are in need of updates and/or replacements to portions of their infrastructure such as treatment facilities, and collection and distribution systems. This challenge is exacerbated by rate structures that are not fully consistent with the funding necessary to meet the updates and replacement needs in a timely manner.
18. ***Limited staff capacity.*** Communities are experiencing difficulty securing staff with the technical expertise and training necessary for them to legally operate and manage sewer treatment plants and collection systems. Listening session participants identified two main drivers behind this trend.
 - First, systems are requiring greater sophistication as they expand capacity and struggle to meet new and more stringent limits.
 - Second, the Idaho legislature recently passed new operator certification requirements designed to ensure systems are operated and maintained properly. However, the legislation has created a short-term gap between the availability of certified operators and the need for such operators.

This situation is playing out in a broader demographic context where the sector is experiencing an aging workforce and is finding it challenging to attract and retain qualified personnel. In effect, Southeastern Idaho is caught up in a troublesome national trend – demand for technically qualified operators is increasing while supply is decreasing.

19. ***Funding.*** Limited funding in the context of the above-mentioned challenges is causing difficulties for the majority of water and wastewater managers. Southeastern Idaho communities are experiencing funding needs for the following:
 - Capacity expansion;
 - Collection and distribution systems expansion;
 - Increased treatment sophistication;
 - Aging system components replacement; and
 - Planning for an expanding population.

Funding, in this context, is challenging for a variety of reasons. First, a lot of funding is needed to keep current levels of service or improve them. Second, Southeastern Idaho has historically maintained a culture of low rates, making it difficult to impose additional fees. Third, in conjunction with the culture of low rates, there is a prevailing ideology that growth should pay for growth instead of making existing customers fund projects such as building connectors to new developments or supplying capacity. How, when, and if development impact fees are collected in unincorporated areas is central to the issue. In addition, portions of the expansion communities may need to plan for eventually growing outside of their existing jurisdictional boundaries. This creates, at minimum, awkwardness when conducting long-term capital planning (they are including in their plans other jurisdictions that may or may not like the idea of potential future incorporation), and make it difficult to float bonds that will in part depend on future, successful annexations.

Regional Approaches and Benefits in the Context of Identified Challenges

After highlighting the key challenges facing water and sewer provision managers, listening session participants identified regional approaches that have been utilized, or could be utilized in the future, to address those challenges, as well as key associated benefits. Substantial regional management approaches have already been successfully implemented in Southeastern Idaho. For example, two cities, and a portion of a county are currently sharing a treatment facility, but operating individual collection systems. The communities involved put together a joint powers group giving each of the major players a vote on the governing board. The success of the approach is based on a recognition by all parties of the importance of aquifer protection, and the financial difficulties associated with addressing the problem individually. Similarly, two other cities also share a treatment plant, but operate individual collection systems.

Because the use of shared management approaches to water and wastewater provision is already prevalent in Southeastern Idaho, listening session participants did not highlight specific future regional approaches that should be utilized. However, participants identified a series of key benefits that are being realized, or could be realized in the future, through implementation of regional approaches including:

- ***Economies of scale.*** Regional approaches present an opportunity to share the cost burden of building facilities as well as operating and managing them. Sharing assets can increase capacity and enhance the borrowing leverage of small communities.
- ***Enhanced aquifer protection.*** Jurisdictional coordination can help protect sensitive aquifers through:
 - Creation of minimum standards for unincorporated development; compatible with centralized systems for future connection;
 - Enhancement of oversight for existing and newly developed decentralized systems to avoid aquifer contamination;
 - Implementation of joint plans to channel development into a pattern that is conducive to future centralized system use; and
 - Expansion of water delivery and supply capacity.
- ***Optimization of technical skill sets and knowledge.*** The need to operate increasingly technically sophisticated treatment systems has driven the need for more highly trained

utility operations staff. This new demand is occurring in the context of a utility workforce environment that finds it increasingly difficult to attract and retain qualified personnel (this is a challenge for the industry throughout the country). Regional approaches allow jurisdictions to share (and in effect optimize) this limited professional resource.

Challenges to Utilization of Regional Approaches

Listening session participants were asked to consider what the potential barriers to further adoption of regional approaches to water and sewer provision. The primary concern identified was autonomy. The following list identifies some of the reasons for apprehension about sharing control of water and sewer provision responsibility:

- Some individual communities have history of related and unrelated disagreements and political posturing;
- Physical separation and/or topography make it difficult to share resources in a practical manner;
- Communities have an interest in maintaining control of the nature and rate of development within a community;
- Communities have concern about lack of access to needed capacity to support growth opportunities;
- Communities have an interest in maintaining a competitive edge in attracting financially attractive development opportunities to a community (e.g., effective regional approaches require joint, long-range planning that requires communities to share potential future development opportunities – communities may not be willing to share these opportunities with other local jurisdictions for fear of losing the opportunity.)
- In some communities, inertia, or the idea that things have been done a certain way for a long time and without significant positive or negative impacts identified in association with the current system, there's not a compelling reason to change;
- Communities fear a loss of control over how resources will be deployed; for example, concern that one community will be required to pay for the needs of another community;
- Different communities may have differences in opinion about appropriate service levels;
- Different communities may have differing public financing philosophies; for example, some communities want to pay as they go, while others prefer (or at least are not hesitant) to utilize bonds;
- Some communities are concerned that community identity will be compromised if resources are shared.

Given the many challenges associated with regionalization of water and sewer services, listening session participants asserted that there generally needs to be a very compelling reason to implement a regional approach such as a high concern of water quality non-compliance (e.g., inability of small community systems to meet more stringent limits), clear demonstration that the costs of individual systems will be significantly higher than a regionalized system, substantial water supply management issues in the context of a shared water source among separate local jurisdictions, or concern for or the reality of aquifer contamination as a result of poor oversight/management of decentralized systems. Southeastern Idaho communities are feeling significant sanitary sewer related drivers and, therefore, are looking seriously at various regional approaches. However, the drivers for pursuing regional approaches to drinking water are not as strong. All of this is then further complicated by the pattern of new, unincorporated development, which both sets up potential long term problems, and simultaneously increases the challenges for

future regional approaches through a lack of standards and patchwork development incompatible with regionalization.

Topic 2 - Challenges Associated with Stormwater and Drainage Management

As rural communities grow and the interface between urban development and agricultural land increases, stormwater and drainage management challenges are becoming of greater importance. Listening session participants were asked to identify key challenges associated with stormwater and drainage management in the context of the NPDES MS4 requirements. The following list summarizes participants' thoughts.

1. ***Urban area boundary definition under the Clean Water Act.*** The definition of urban area boundaries for purposes of stormwater regulation is currently based on Census data which can be significantly detached from the on-the-ground reality. Drainage boundaries often do not follow jurisdictional boundaries, and listening session participants expressed a need for local input in the urban boundary development process.
2. ***Lack of regulatory clarity.*** Participants indicated that there is substantial uncertainty on the part of stormwater and drainage managers about the intent of Phase II MS4 permits, the TMDL requirements in the context of MS4 requirements, what constitutes the basis for meeting the six minimum controls requirement, and how a community can establish objective measures of stormwater quality improvement.
3. ***Lack of sufficient local institutional capacity.*** Prior to the emergence of MS4 requirements, in many communities stormwater management has been addressed as part of local street department activities with funding provided through general funds. MS4 requirements are driving significant additional programmatic, staffing, and capital outlay needs inconsistent with street department authorities, staffing, and funding levels. Efforts to form separate stormwater utilities with the needed authorities and funding mechanisms have been met with mixed success in part because community residents are unaware of the intent and need for enhanced management and are thus reluctant to support increased funding and an expansion of local government activity. Lack of support for proactive stormwater management has led to the prevalence of a "management by crisis" approach. In addition, rural communities often have limited technical capabilities and insufficient resources to meet reporting requirements.
4. ***Overlapping jurisdictional relationships.*** Multiple jurisdictions are often covered under one Phase II MS4 permit. As a result, stormwater permits can lack cohesion among the identified co-permittees with certain jurisdictions regulated separately within the terms of other jurisdictions' MS4 permits (e.g., a university property operating within a municipal jurisdiction's boundary that has a separate MS4).
5. ***Shallow Injection well impacts.*** One technique for on-site management of stormwater (particularly development in unincorporated areas), is the use of shallow injection wells. This technique raises concerns for contamination of shallow aquifers in certain locations throughout Southeast Idaho.
6. ***Vector control.*** Retention basins are a second common method for stormwater management in response to new MS4 requirements. Under certain management conditions, retention basins will retain standing water which provides a breeding ground for mosquitoes. With the

emergence of West Nile Virus as a health concern, this potential for creating new and uncontrolled mosquito breeding habitat, raises public health concerns.

7. ***Agricultural conveyance management.*** The traditional agricultural water delivery and drainage conveyance systems are coming under growing pressure as urbanized areas expand and increasingly intersect with them, and stormwater quality raises concerns about the quality of delivered water. In addition, there is significant concern that Clean Water Act regulations will apply to agricultural canals that allow non-agricultural discharge. MS4 requirements focus considerable attention on Clean Water Act regulatory liability for stormwater discharges. Some agricultural conveyance systems have historically accepted urban drainage, while others have not. This creates inconsistency in the access and stormwater management options municipal entities have available.

State Role

Listening session participants explored a number of ways in which the state could aid communities with regional approaches to water and sewer provision and stormwater management including:

- Creating of a centralized repository containing information on stormwater management process standardization, a Best Management Practices manual, and general process guidance.
- Altering local land use approaches to enable municipalities greater ability to influence the nature of development that can affect them even though it may occur outside their designated areas impact.
- Clearly defining who should be assigned management responsibilities related to stormwater; and
- Adjusting local development requirements to better ensure the use of package plants will be compatible with municipal sewer systems, making a consistent regional approach possible.

Closing Comments

At the end of the listening session, participants were reminded of the purpose of the sessions, and the immediate path forward. Participants indicated comfort with the review cycle of the thematic summary, and expressed an interest in staying involved and having the opportunity to review the report encompassing all of the session summaries.

Appendix D

Pocatello Agricultural Interests Meeting Summary November 1, 2006 1:00 – 4:30 pm

Background

The Idaho Department of Environmental Quality, under the direction of the joint legislative Environmental Common Sense Committee, has conducted a series of listening sessions to document the perspectives of different constituencies statewide on the topics of regional aspects of water and sewer services, and stormwater and drainage management. Participants were asked questions about the challenges faced, current approaches to addressing those challenges, possible future solutions, and what role, if any, the state could play, in the context of the two subject areas. The listening sessions were held in Coeur d'Alene, Pocatello, and Boise, and divided into three interest areas: Agricultural interests, utilities interests, and other government interests. In Coeur d'Alene only a utilities interests meeting was held due to the lack of a significant irrigated agricultural presence in the Idaho panhandle, and lack of availability for participation in the government session. Three meetings were held in both Pocatello and Boise. Separate sessions for each interest area were conducted to allow for an in-depth exploration of the topic areas from the individual perspectives.

This document contains information gathered during the Pocatello agricultural interests listening session on November 1, 2006 from 1:00 – 4:30 pm. The information gathered during the session has been used to produce a thematic summary that will ultimately be rolled into a report, along with the other listening session summaries, and given to the Idaho State Legislature. The information gathered will not be used to inform any policy decisions or create a basis for recommendations.

Overarching Challenges

As rural communities grow and the interface between urban development and agricultural land increases, stormwater and drainage management challenges are becoming of greater importance. Listening session participants were asked to identify key challenges associated with stormwater and drainage management in the context of the NPDES MS4 requirements. The following list summarizes participants' thoughts.

- ***Lack of consistency among approaches.*** Due in part to different geographic conditions and in part to long-standing local agreements, agricultural conveyance owners/operators have taken distinctly different approaches to the receipt of urban stormwater into their systems. Certain owner/operators do not allow urban drainage, some do not allow untreated urban drainage, and others are accepting urban drainage and operating and maintaining their systems accordingly. This difference in approaches sends a mixed message and creates varying expectations on the part of municipal and other governments that have an interest in working with agricultural conveyance owners/operators on stormwater/drainage management.

- ***Lack of enforcement capabilities.*** Small agricultural conveyance owners/operators do not possess the funding and man power to prevent illegal stormwater discharges into agricultural systems.
- ***Lack of long range planning.*** Communities are not required to have an MS4 Phase II Permit until they reach the population threshold of 10,000 people. Listening session participants asserted that there is significant pushback on the part of citizens to be regulated before that threshold is reached, making it difficult to plan proactively. Further, many rural communities have strong positive growth drivers that often outweigh other issues politically.
- ***Cultural changes.*** As communities have developed, the cultural fabric has changed and local political leaders, such as county commissioners, do not necessarily have a good working understanding of agricultural conveyance systems, or the needs of the agricultural community in general.
- ***Undersized systems.*** Agricultural conveyance systems in Southeastern Idaho precede urban development, and therefore were built without the necessary infrastructure to handle increased volumes of water generated by urban runoff. For example, many of the canals do not have culverts.
- ***Lack of education.*** Listening session participants identified a lack of education pertaining to stormwater management on the part of the general public in terms of a basic on-the-ground picture of what's out there and the expansiveness of the challenges (i.e., statewide) that drainage managers face. Participants believed the public also needs education on jurisdictional rights, ownership, and maintenance of agricultural conveyance systems. The current lack of education creates a situation where the first experience many people have with stormwater issues is adversarial.
- ***CWA regulatory liability.*** For those conveyance owners/operators that substantially restrict or outright ban urban drainage from their systems, CWA regulatory liability is an important consideration. The failure of EPA to provide clear guidance on the implications of co-mingled waters in agricultural conveyance systems leaves these operators strongly apposed to receipt of urban drainage water.
- ***Flood liability exposure.*** Allowing stormwater into agricultural conveyances raises significant concerns about heightening flood risks by introducing short-term, high volume flows into the system. Agricultural conveyance managers are required to manage, and hold liability for, the water flowing through their systems by state law. Acceptance or unauthorized discharges of stormwater to the conveyances raises flooding risk and results in increased liability exposure for owners/operators. This potential problem is exacerbated by the design of the conveyances which both deliver irrigation water (and become narrower in the process) and drain agricultural lands (becoming wider in the process). Stormwater placed entering the delivery portion of the conveyance system can create substantial flooding risk
- ***Conveyance maintenance difficulties.*** Agricultural owners/operators have established a regular rhythm of annual maintenance activities, with major maintenance scheduled for the non-irrigation season (mid-October through mid-April) when conveyances hold little

or no water. Stormwater discharges can cause conveyances to be wet year round complicating the ability of owners to maintain the conveyances for their proper use. Stormwater also places a “24-7” maintenance requirement on the conveyances. For example, the accumulation of snow in agricultural conveyances used for stormwater management can create flooding risk. This drives an increased need for snow removal maintenance beyond that required for strictly managing agricultural water. In addition, the velocity of stormwater (and, therefore, its erosion potential) can be greater than that of agricultural drainage, increasing the potential for wear and tear on agricultural conveyances.

Methods and Approaches

After identifying the overarching challenges related to stormwater and drainage management, listening session participants conveyed approaches to stormwater management that are currently being used, or could be used in the future. For example, some communities have a long-standing history of discharging municipal stormwater into agricultural conveyances, while others have implemented a plan to phase-out such activities. Each agricultural owner/operator represented has reached a point of compromise with local municipalities, and have agreements in place to serve the basic needs of their respective communities. A session participant further identified the fact that if new developments (in small communities) are built without curb-and-gutter stormwater systems, it is possible to avoid the related management issues.

Stormwater/drainage management solutions that could be implemented in the future include management by cities of their own discharges (with new developments ensuring stormwater is handled on site), explicit policy or regulations clearly stating that agricultural canals cannot be used for stormwater discharge, a requirement that stormwater discharges meet Clean Water Act standards before being introduced into an agricultural conveyance system, and wider use of stormwater retention ponds.

State Role

Participants indicated that the nature of the problems that arise with stormwater management have been dealt with on a local, case-by-case basis. While ideas such as a state law standardizing operating procedures have been discussed, the localized nature of the issue makes such generic solutions difficult. The primary roles of the state could be providing guidelines to solve problems as growth occurs, and creating a pool of state money that could be used to help communities, including pre-regulatory communities, deal with stormwater management issues.

Closing Comments

Because Southeastern Idaho is dominated by small communities, participants characterized stormwater management as an emerging issue that will become more prevalent as more communities reach the threshold for NPDES MS4 Phase II Permit applicability. Session participants characterized the transition of smaller communities from septic systems to sewers, and the related challenges as a more pressing issue.

Appendix E

Boise Utilities Interests Listening Session Summary ***November 2, 2006 8:30 am – 12:30 pm***

Background

The Idaho Department of Environmental Quality, under the direction of the joint legislative Environmental Common Sense Committee, has conducted a series of listening sessions to document the perspectives of different constituencies statewide on the topics of regional aspects of water and sewer services, and stormwater and drainage management. Participants were asked questions about the challenges faced, current approaches to addressing those challenges, possible future solutions, and what role, if any, the state could play, in the context of the two subject areas. The listening sessions were held in Coeur d'Alene, Pocatello, and Boise, and divided into three interest areas: Agricultural interests, utilities interests, and other government interests. In Coeur d'Alene only a utilities interests meeting was held due to the lack of a significant irrigated agricultural presence in the Idaho panhandle, and lack of availability for participation in the government session. Three meetings were held in both Pocatello and Boise. Separate sessions for each interest area were conducted to allow for an in-depth exploration of the topic areas from the individual perspectives.

This document contains information gathered during the Boise Utilities Interests listening session on November 2, 2006 from 8:30 am – 12:30 pm. The information gathered during the session has been used to produce a thematic summary that will ultimately be rolled into a report, along with the other listening session summaries, and given to the Idaho State Legislature. The information gathered will not be used to inform any policy decisions or create a basis for recommendations.

Topic 1 - Overarching Water and Sanitary Sewer Provision Challenges

To begin the listening session, participants were asked to identify what they believe to be the key challenges faced by their jurisdictions in the provision of water and sewer services. The following list summarizes participants' thoughts.

20. ***Growth in unincorporated areas.*** In unincorporated areas, there is significant pressure for “decentralized, patchwork” development that is poorly placed and not conducive to connection to more centralized utility services. Developers seeking to minimize short-term costs are tending to turn to use of “package plants” and/or on-site septic systems for sanitary waste management. The decentralized systems are often not established with compatibility for potential later connection to more centralized systems in mind (e.g., they do not follow construction standards compatible with local municipal systems and/or development locations preclude economic connector conveyance use). This problem is compounded because counties are reluctant to allow cities to increase their areas of impact, making it difficult for cities to adequately size treatment facilities, even though the rapid growth will require eventual service provision. In addition, The Idaho Department of Water Resources will issue

permits for wells, even if a local government has designated an area to have a community or municipal water supply. There is no mechanism for the state agency to consider a local government plan, unless it is in a critical ground water area, or other ground water designation. Those areas are designated by the state agency.

21. ***New water and sewer capacity demands in incorporated areas.*** In incorporated areas, growth is driving the need for capacity expansion of water and sewer systems, heightening the associated pressure on capital funding requirements and local water and sewer rate affordability.
22. ***New limits.*** New discharge requirements due to TMDL implementation and other standards are requiring expanded capacity and are changing the nature of the treatment that must take place. This leads to an increase in the need for systems of greater technical sophistication.
23. ***Aging infrastructure.*** Many water and wastewater systems are in need of updates and/or replacements to portions of their infrastructure such as treatment facilities, and collection and distribution systems. This challenge is exacerbated by rate structures for some utilities that are not fully consistent with the funding necessary to meet the updates and replacement needs in a timely manner.
24. ***Funding.*** Limited funding in the context of the above-mentioned challenges is causing difficulties for the majority of water and wastewater managers. Communities are experiencing funding needs for the following:
 - Capacity expansion;
 - Collection and distribution systems expansion;
 - Increased treatment sophistication;
 - Aging system components replacement; and
 - Planning for an expanding population.

Funding, in this context, is challenging for a variety of reasons. First, substantial new capital is needed to maintain current levels of service or improve them. Second, in conjunction with a culture of low rates, there is a prevailing sense that growth should pay for growth instead of making existing customers fund projects such as building connectors to new developments or supplying capacity. How, when, and if development impact fees are collected in unincorporated areas is central to the issue. In addition, portions of the expansion communities may need to plan for resides outside of their existing jurisdictional boundaries. This creates, at minimum, awkwardness when conducting long-term capital planning (they are including in their plans other jurisdictions that may or may not like the idea of potential future incorporation), and make it difficult to float bonds that will in part depend on future, successful annexations.

Listening session participants identified the State Revolving Fund (SRF) as an important source of funding, but said that the extensive administrative requirements create a disincentive for use compared to bonding. Further, court decisions such as *Loomis v. City of Hailey* have decreased the ability of water and sewer providers to fund future capacity needs.

25. ***EPA primacy.*** Several participants indicated challenges establishing CWA applicability and interpretations appropriate to local conditions in Idaho within the context of EPA primacy in the NPDES program. They indicated a desire for the State of Idaho to take primacy in the future.
26. ***Aquifer protection.*** Most public drinking water supply comes from ground water. Many residents of the Treasure Valley share common water supplies that, in places, come very close to the surface. The key concern with living on top of the aquifer is water supply contamination. Certain, and possibly many, jurisdictions depend on water supplies, the recharge for which resides outside of their areas of influence. This leaves these jurisdictions vulnerable to water contamination and/or supply issues outside their control.
27. ***Water supply management.*** Participants anticipate the historical use of groundwater for drinking water and other domestic/commercial uses will come under increasing supply pressure as the Treasure Valley grows. This will create the need to increasingly draw on surface water as a source for potable water. As this need materializes, it will drive the need for new (costly) treatment facilities and for further management of access to water in the context of existing water rights. In this context, participants further identified the need to further explore and refine approaches to wastewater reuse, and one participant stressed the need to consider further surface water supply management in the form of an additional dam on the Boise River.

Regional Approaches and Benefits in the Context of Identified Challenges

After highlighting the key challenges facing water and sewer provision managers, listening session participants identified regional approaches that have been utilized, or could be utilized in the future, to address those challenges, as well as key associated benefits. Session participants explained that Treasure Valley utilities are actively engaged in a variety of regional approaches including coordinating activities, and entering into joint service and other agreements to share capacity. Overall, session participants indicated a high degree of comfort with current levels of regional efforts having a strong feeling that what is needed to be done is getting done. Two primary potential future approaches were identified.

- ***Creation of a core group.*** Participants believed the creation of a core regional working group operating within a partnership framework focused on establishing and maintaining uniform standards and sharing information could greatly increase efficiency in the context of water and sanitary sewer provision.
- ***Development of a master/regional water and sewer plan.*** A jointly developed plan, containing agreements about water and sanitary waste needs and desired management strategies could allow water and sewer provision managers to achieve economies of scale by consolidating resources, provide greater levels of service, and share technical expertise.

Listening session participants explained that current service provision has been following individual land use decisions. Creating a core group and/or master plan that coordinates

knowledge and expertise would benefit all involved parties. The possibility of creating a public/private partnership, particularly in the context of water provision, was also brought up.

Challenges to Utilization of Regional Approaches

Listening session participants were asked to consider what the potential barriers to further adoption of regional approaches to water and sewer provision are. Participants identified avoiding the addition of another layer of government as a key constraint, and believed that the public favors consolidation of government over the creation of new entities. The following list summarizes participants' thoughts in this context.

- ***Political boundary issues.*** The greater Boise area is characterized by communities rapidly growing together. Listening session participants indicated that annexation of communities and the subsequent jurisdiction over water and sewer service provision can be fairly contentious undertakings. In addition, participants indicated that current state government planning policies complicate regional approaches, citing examples such as the constraints the Idaho Land Use Planning Act places on bringing planned unit communities into municipal boundaries.
- ***Unequal partnerships.*** Participants expressed concern that management partnerships between jurisdictions of different sizes could result in an unequal allocation of shared resources. For example, money might go to the larger entity because it is deemed to have a more pressing problem due to having a larger population. This ultimately results in the small community not benefiting from the shared arrangement.
- ***Funding.*** Participants indicated that jurisdictions can have different capital funding philosophies. Some jurisdictions utilize bonds to fund future capacity needs, while others feel that growth should pay for growth. The polarity around this issue makes it difficult to raise funds.

Topic 2 - Stormwater and Drainage Management Challenges

Listening session participants were asked to identify key challenges associated with stormwater and drainage management in the context of the NPDES MS4 requirements. The following list summarizes participants' thoughts.

1. ***Maintaining Clean Water Act exemption.*** Co-mingled agricultural water and urban stormwater threatens the Clean Water Act exemption currently in place for agricultural conveyances (although work is underway to clarify CWA applicability to conveyances carrying co-mingled water, EPA has not yet provided guidance sufficiently specific to alleviate current concerns about the agricultural exemption). There are further concerns about the impact of urban stormwater on the quality of water delivered to users from agricultural conveyances.
2. ***Overlapping jurisdictional relationships.*** Multiple jurisdictions are often covered under one MS4 permit. As a result, stormwater permits can lack cohesion among the identified co-

permittees, making it difficult to determine management and funding responsibilities. Co-permittees often find it difficult to coordinate activities, creating gaps in management.

3. ***Access to cost effective drainage ways.*** Much of the current drainage infrastructure predates urban/suburban development and was designed for irrigated agricultural runoff. This existing infrastructure made effective use of natural drainage channels and other terrain advantages to move drainage water efficiently. As land use conversion has taken place and as certain agricultural conveyances owner/operators have raised concerns regarding receiving urban drainage, urban drainage entities have faced the prospect of developing less than optimal drainage solutions (as natural drainage ways are already dedicated to agricultural conveyances).
4. ***Complex infrastructure and jurisdictional responsibility.*** The agricultural and urban plumbing systems are complicated and intertwined, and have different goals, objectives, and policies, making it difficult to determine responsibility for:
 - Facilitating coordination;
 - Filling in gaps in responsibility;
 - Multi-party drain use;
 - Maintenance and repair; and
 - Flood and emergency management response and liability.

Moreover, drainage systems overlap in space even if they do not overlap in terms of who is covered under an MS4 permit. As land uses change, responsibility for drainage may shift from one entity to another. For example, when agricultural property is developed the urban drainage entity may become responsible for drainage from that particular piece of land. Listening session participants indicated that there is a lack of clarity over who is responsible for drainage if a property is still supplied with irrigation water for landscaping. This lack of clarity in the law has led to disputes between entities.

One participant indicated that there is also a difficult administrative process in place for changing the status of existing drainage districts. This constrains options for shifting and/or consolidating drainage management responsibilities when land use conversion from agricultural to urban uses takes place.

5. ***Agricultural Conveyance Capacity.*** Agricultural conveyances were not designed to handle urban stormwater discharges, and as a result, often do not have adequate capacity. The delivery system (canals and laterals) is designed to get smaller in the downstream direction, whereas drains typically get larger. Decreasing downstream capacity in the delivery system creates concern about flooding, and the related liability and management responsibilities.
6. ***Aquifer recharge.*** Growth and the associated increases in impervious surfaces change the volume and quality of water available to recharge the aquifer, creating concerns about contamination and supply.
7. ***Lack of a “safety zone” where different interest groups can work together.*** There are significant trust issues between various interest groups about the motivations behind coordinated stormwater management efforts. An example was raised where a project

presented an opportunity to jointly solve mitigation and water quality issues through the use of wetland ecosystem services, but was unable to move forward because of a lack of trust. Listening session participants asserted that there are institutional and infrastructure management related gaps that could be filled through coordination, but the trust issue will need to be resolved first.

8. ***Lack of a comprehensive long range plan.*** Existing stormwater and drainage management entities have limitations to what they can legally accomplish individually. Listening session participants identified comprehensive long range planning as a key need. Current planning gaps identified include:
 - A lack of a big picture, or basin-wide planning perspective;
 - The limited ability of individual entities to accurately measure growth impacts;
 - A lack of an up-to-date flood plain analysis,
 - A need for a mechanism to fill institutional and management gaps; and
 - A need for vested interest by all parties in jointly solving problems.
9. ***Gaps in stormwater management responsibility.*** A listening participant indicated that some highway districts are owner/operators of stormwater/drainage systems and are consequently required to have NPDES stormwater permits. Under Idaho law, highway districts do not have the authorities required of stormwater permit holders. Some districts have been successful partnering with local jurisdictions to meet the requirements, but the counties and cities may not be required to participate.

Stormwater/Drainage Management: State Role

Listening session participants explored a number of ways in which the state could aid communities with stormwater and drainage management. These ideas emerged in the context of an expressed interest in enabling some type of regional approach to provide general oversight, coordination, and management of stormwater/drainage management. Participants indicated a sense that developing such an entity could and should leverage existing government organizations, thereby avoiding creating an additional layer of government. Specific ideas suggested in this context including the following.

- ***Creation of a forum.*** The State could take an active role in creating a neutral forum to allow different interest groups to share knowledge and information about how individual entity actions may benefit another group, as well as communicate potential solutions. The forum would need to:
 - Facilitate collaboration;
 - Address funding and authority concerns;
 - Allow members to share knowledge and approaches;
 - Leverage successful jurisdictional approaches;
 - Have a regional planning component; and
 - Overcome the current adversarial mentality.
- ***Regional planning.*** A State mandate requiring regional-scale planning to leverage the stormwater management issue for all involved parties.

- ***Education.*** Creation and/or communication of a common language, agreed upon as a group, to share understanding with the planning community and the general public has been identified as a potential state role.
- ***Hosting of a statewide workshop.*** Listening session participants indicated that the State could host or facilitate a statewide workshop (or workshops) to refine understanding about stormwater and drainage management, as well as entertain information from national experts who have addressed some of the challenges faced by Idaho stormwater and drainage managers in similar situations.

Closing Comments

Listening session participants indicated that while jurisdictions face significant challenges in terms of water and sanitary sewer provision and stormwater management, a lot is being done, and there is a reasonable level of comfort with the way things are going. However, increased coordination between all interest areas will be a necessary component of any solution.

At the end of the listening session, participants were reminded of the purpose of the sessions, and the immediate path forward. Participants indicated comfort with the review cycle of the thematic summary, and expressed an interest in staying involved and having the opportunity to review the report encompassing all of the session summaries.

Appendix F

Boise Government Listening Session Summary **November 2, 2006 1:15 – 5:15 pm**

Background

The Idaho Department of Environmental Quality, under the direction of the joint legislative Environmental Common Sense Committee, has conducted a series of listening sessions to document the perspectives of different constituencies statewide on the topics of regional aspects of water and sewer services, and stormwater and drainage management. Participants were asked questions about the challenges faced, current approaches to addressing those challenges, possible future solutions, and what role, if any, the state could play, in the context of the two subject areas. The listening sessions were held in Coeur d'Alene, Pocatello, and Boise, and divided into three interest areas: Agricultural interests, utilities interests, and other government interests. In Coeur d'Alene only a utilities interests meeting was held due to the lack of a significant irrigated agricultural presence in the Idaho panhandle, and lack of availability for participation in the government session. Three meetings were held in both Pocatello and Boise. Separate sessions for each interest area were conducted to allow for an in-depth exploration of the topic areas from the individual perspectives.

This document contains information gathered during the Boise government interests listening session on November 2, 2006 from 1:15 – 5:15 pm. The information gathered during the session has been used to produce a thematic summary that will ultimately be rolled into a report, along with the other listening session summaries, and given to the Idaho State Legislature. The information gathered will not be used to inform any policy decisions or create a basis for recommendations.

Topic 1 - Overarching Challenges

To begin the listening session, participants were asked to identify what they believe to be the key challenges faced by their jurisdictions in the provision of water and sewer services. The following list summarizes participants' thoughts.

28. ***Decentralized Water and Sewer Service Development in Unincorporated Areas.*** In unincorporated areas, there is significant pressure for “decentralized” development. Developers seeking to minimize short-term costs are tending to turn to use of “package plants” and/or on-site septic systems for sanitary waste management. The decentralized systems are often not established with compatibility for potential later connection to more centralized systems in mind (e.g., they do not utilize construction standards compatible with local municipal systems and/or development locations form a “patchwork” which hinders future, cost-effective connection to available centralized systems. Additionally, participants indicated that Counties have only limited oversight ability on these systems, generating concerns that, over time, system performance will degrade, creating the potential for environmental impacts to ground and surface waters. Developers are also tending to use individual wells for provision of water services. Drinking water system regulations create an economic incentive to use highly decentralized water provision techniques (e.g., individual wells). An increase in the number of individual wells makes overall community water supply management more difficult and increases groundwater contamination risks.
29. ***New Water and Sewer Capacity Demands in Incorporated Areas.*** In incorporated areas, growth is driving the need for capacity expansion of water and sewer systems, heightening the associated pressure on capital funding requirements and local water and sewer rate affordability.
30. ***New limits.*** New discharge requirements due to TMDL implementation and other standards are requiring expanded capacity and are changing the nature of the treatment that must take place. This leads to an increase in the need for systems of greater technical sophistication.
31. ***Aquifer Protection.*** Many residents of the greater Boise area share common water supplies that, in places, come very close to the surface. The key concern with living on top of the aquifer is water supply contamination. Certain, and possibly many, jurisdictions depend on water supplies, the recharge for which resides outside of their areas of influence. This leaves these jurisdictions vulnerable to water contamination and/or supply issues outside their control.
32. ***Aging infrastructure.*** Many water and wastewater systems are in need of updates and/or replacements to portions of their infrastructure such as treatment facilities, and collection and distribution systems. This challenge is exacerbated by rate structures that are not fully consistent with the funding necessary to meet the updates and replacement needs in a timely manner.
33. ***Limited staff capacity.*** Communities are experiencing difficulty securing staff with the technical expertise and training necessary for them to legally operate and manage sewer treatment plants and collection systems. Listening session participants identified two main drivers behind this trend.
 - First, systems are requiring greater sophistication as they expand capacity and struggle to meet new and more stringent limits.
 - Second, the Idaho legislature recently passed new operator certification requirements designed to ensure systems are operated and maintained properly. However, the

legislation has created a short-term gap between the availability of certified operators and the need for such operators.

This situation is playing out in a broader demographic context where the sector is experiencing an aging workforce and is finding it challenging to attract and retain qualified personnel.

34. **Funding.** Limited funding in the context of the above-mentioned challenges is causing difficulties for the majority of water and wastewater managers. Boise area communities are experiencing funding needs for the following:
- Capacity expansion;
 - Collection and distribution systems expansion;
 - Increased treatment sophistication; and
 - Aging system components replacement; and
 - Planning for an expanding population.

Funding, in this context, is challenging for a variety of reasons. First, substantial funding is needed to maintain and/or improve current service levels. . Second, some Treasure Valley communities have historically maintained a culture of low rates, making it difficult to impose additional fees. Third, in conjunction with the culture of low rates, there is a prevailing ideology that growth should pay for growth instead of making existing customers fund projects such as building connectors to new developments or supplying capacity. How, when, and if development impact fees are collected in unincorporated areas is central to the issue. There is a limited window of opportunity for counties to collect impact fees on developments, which is a necessary step in having developments pay for their full life cycle costs. In addition, portions of the expansion communities may need to plan for eventually growing outside of their existing jurisdictional boundaries. This creates, at minimum, awkwardness when conducting long-term capital planning (they are including in their plans other jurisdictions that may or may not like the idea of potential future incorporation), and make it difficult to float bonds that will in part depend on future, successful annexations.

35. **Compliance challenges.** Listening session participants indicated that federal and state regulations, which by default are not tailored to individual areas, create a substantial strain on water and sewer managers' resources by requiring compliance without providing the necessary funding.

Benefits of Regional Approaches in the Context of Identified Challenges

After highlighting the key challenges facing water and sewer provision managers, listening session participants identified key benefits that could potentially be realized through the implementation of regional approaches. The following list summarizes their thoughts.

- **Economies of scale.** Regional approaches present an opportunity to share the cost burden of building facilities as well as operating and managing them. Sharing assets can increase capacity and enhance the borrowing leverage of small communities.
- **Enhanced aquifer protection.** Jurisdictional coordination can help protect sensitive aquifers through:

- Creation of minimum standards for unincorporated development; compatible with centralized systems for future connection;
 - Enhancement of oversight for existing and newly developed decentralized systems to avoid aquifer contamination;
 - Implementation of joint plans to channel development into a pattern that is conducive to future centralized system use; and
 - Expansion of water delivery and supply capacity.
- ***Optimization of technical skill sets and knowledge.*** The need to operate increasingly technically sophisticated treatment systems has driven the need for more highly trained utility operations staff. This new demand is occurring in the context of a utility workforce environment that finds it increasingly difficult to attract and retain qualified personnel (this is a challenge for the industry throughout the country). Regional approaches allow jurisdictions to share (and in effect optimize) this limited professional resource.
 - ***Joint long range planning.*** Listening session participants identified coordinated, all-inclusive, long-term planning as a potential means to effectively utilize key leverage points. For example, counties could require that new developments in unincorporated areas be compatible with municipal water and sewer lines so that they may eventually be hooked up. One participant additionally suggested that a requirement for developers to prepare and receive certification for a long-term financial and maintenance plan for all water and sewer services would create incentives for building future regional approach considerations into current development, while better assuring sensitive resources such as groundwater will be adequately protected.

Challenges to Utilization of Regional Approaches

Listening session participants were asked to consider what the potential barriers to further adoption of regional approaches to water and sewer provision. The following list summarizes their thoughts.

- ***Autonomy.*** Communities can be inherently competitive in terms of securing a tax base, and maintaining control of the nature of growth that takes place, and what constitutes the best method to accommodate it. Further, any joint agreements need to ensure that all parties have access to adequate capacity, and that an equitable cost sharing relationship is established. Listening session participants also identified changes in political leadership (and personalities) as having potentially substantial effects on the success of agreements, reinforcing the need for well crafted arrangements.
- ***Adding of another layer of government/bureaucracy.*** Session participants expressed concern that a regional approach would be seen as adding another layer of bureaucracy, with all of its associated costs, onto an already complicated system.
- ***Public perception.*** Session participants explained that there is a prevalent public perception that water and sewer services are simply a given (i.e., when a person flushes a toilet, the waste just goes away). A cultural change, including education about the hidden water and sewer provision infrastructure, is needed.

Several session participants asserted that the driving force behind all management decisions is to provide high quality service in a timely manner, which can lead to a *decentralization* of service for rapidly developing areas. For example, package plants and satellite plants have been used widely to meet immediate needs. Further, in some cases decentralization has been seen as advantageous because it requires lower up-front cost than creating a regional approach.

Topic 2 - Challenges Associated with Stormwater and Drainage Management

As communities grow and the interface between urban development and agricultural land increases, stormwater and drainage management challenges are becoming of greater importance. Listening session participants were asked to identify key challenges associated with stormwater and drainage management in the context of the NPDES MS4 requirements. The following list summarizes participants' thoughts.

1. ***Lack of regulatory clarity.*** Participants indicated that there is substantial uncertainty on the part of stormwater and drainage managers about the intent of Phase I and II MS4 permits, the TMDL requirements in the context of MS4 requirements, what constitutes the basis for meeting the six minimum controls requirement, and how a community can establish objective measures of stormwater quality improvement.
2. ***Lack of education.*** Listening session participants identified a lack of education pertaining to stormwater management on the part of the general public as well as newly elected officials in terms of a basic on-the-ground picture of what's out there and the expansiveness of the challenges (i.e., statewide) that drainage managers face. Participants believed the public also needs education on jurisdictional rights and responsibilities, stormwater retention regulations, and the role and responsibilities of individuals.
3. ***Lack of long range planning.*** Communities are not required to have an MS4 Phase II Permit until they reach the population threshold of 10,000 people. Listening session participants indicated that there is significant pushback on the part of citizens to be regulated before that threshold is reached, making it difficult to plan proactively. Further, many rural communities have strong positive growth drivers that often outweigh other issues politically.
4. ***Complex infrastructure and jurisdictional responsibility.*** The agricultural and urban plumbing systems are complicated and intertwined, and have different goals, objectives, and policies, making it difficult to determine responsibility for:
 - Facilitating coordination;
 - Filling in gaps in responsibility;
 - Multi-party drain use;
 - Maintenance and repair; and
 - Flood and emergency management response and liability.
5. ***Vector control.*** Retention basins are a common method for stormwater management in response to new MS4 requirements. Under certain management conditions, retention basins will retain standing water which provides a breeding ground for mosquitoes. With the emergence of West Nile Virus as a significant health concern, this potential for creating new and uncontrolled mosquito breeding habitat, raises public health concerns.

6. **Funding.** Because single MS4 permits can cover multiple organizations, it is unclear who is responsible for funding stormwater management. Listening session participants also indicated that it is difficult to secure funding for stormwater management because there is no history of funding requirements, and demonstrating “measurable benefits” to political leaders and the public takes considerable time and effort.

Methods and Approaches

After identifying the overarching challenges related to stormwater and drainage management, listening session participants were asked to share potential methods and approaches that could be used to address them. The following list summarizes their thoughts.

- **Education.** A need to create a common language to share understanding with the planning community and the general public has been identified. Examples of information that could be shared include:
 - What stormwater is;
 - How urban drainage systems and agricultural conveyance systems work;
 - Roles and responsibilities within the system;
 - Associated financial costs;
 - Regulatory processes; and
 - System ownership and operational needs.
- **Integration of stormwater management planning with pre-development.** Listening session participants identified creating development agreements, requiring county approval, ensuring proper maintenance, taking advantage of new approaches and technology, and attempting to make stormwater an amenity as a potentially effective way to improve stormwater management.
- **Sharing of national experience.** Session participants recognize that other areas of the U.S. have addressed similar challenges regarding stormwater management. Rather than reinventing the wheel time and again, a state-wide forum for sharing knowledge and information could be created.

Closing Comments

Listening session participants identified education as a key component of effectively addressing the challenges around both water and sanitary sewer provision and stormwater and drainage management. While utilizing local knowledge would be optimal, participants indicated that expertise highlighting potential solutions that are proven to work will likely have to come from DEQ or EPA.

Appendix G

Boise Agricultural Interests Meeting Summary **November 3, 2006, 8:30 am – 12:30 pm**

Background

The Idaho Department of Environmental Quality, under the direction of the joint legislative Environmental Common Sense Committee, has conducted a series of listening sessions to document the perspectives of different constituencies statewide on the topics of regional aspects of water and sewer services, and stormwater and drainage management. Participants were asked questions about the challenges faced, current approaches to addressing those challenges, possible future solutions, and what role, if any, the state could play, in the context of the two subject areas. The listening sessions were held in Coeur d'Alene, Pocatello, and Boise, and divided into three interest areas: Agricultural interests, utilities interests, and other government interests. In Coeur d'Alene only a utilities interests meeting was held due to the lack of a significant irrigated agricultural presence in the Idaho panhandle, and lack of availability for participation in the government session. Three meetings were held in both Pocatello and Boise. Separate sessions for each interest area were conducted to allow for an in-depth exploration of the topic areas from the individual perspectives.

This document contains information gathered during the Boise agricultural interests listening session on November 3, 2006 from 8:30 am – 12:30 pm. The information gathered during the session has been used to produce a thematic summary that will ultimately be rolled into a report, along with the other listening session summaries, and given to the Idaho State Legislature. The information gathered will not be used to inform any policy decisions or create a basis for recommendations.

Challenges Associated with Stormwater and Drainage Management

To begin the listening session, participants were asked to identify what they believe to be the key challenges their jurisdictions face in the context of stormwater and drainage management. They were also asked to highlight the drivers behind the challenges. The following list summarizes participants' thoughts.

- ***“Public resource” perception.*** There is a prevalent public perspective that agricultural conveyances are available for public purposes. Examples include requests for recreational easements, assumptions that use for urban drainage and wastewater discharges should be allowed, and concerns regarding maintenance activities (such as tree thinning) that are perceived to affect aesthetics. Participants indicated that this perception problem extends to government agencies as well. This creates pressure on the managers of such systems and indicates a clear need for heightening recognition about the intended use of these systems.
- ***Maintaining Clean Water Act exemption.*** Under the CWA, there is a clear and well-established exemption from regulation for run-off from agricultural operations. Owners/managers of agricultural conveyances are concerned co-mingling of agricultural water with non-agricultural (e.g., urban) drainage water and waste water will threaten the Clean Water Act exemption. Efforts are underway in Idaho to obtain a clear legal opinion, but the U.S. EPA has thus far not produced the needed clarity.
- ***Quality of delivered water.*** The historical purpose of agricultural conveyances is to provide irrigation water to lands in agricultural use. The quality of the delivered water must remain consistent with that intended purpose. Urban runoff is known to contain a variety of contaminants (e.g., motor oil) not otherwise typically present in agricultural irrigation water. Co-mingled water, as a result, raises concerns for irrigation operations. There is also concern for regulatory liability and even third-party liability to be imposed on agricultural users resulting from non-agricultural impacts to the agricultural deliveries.
- ***Flood liability exposure.*** Allowing stormwater into agricultural conveyances raises significant concerns about heightening flood risks by introducing short-term, high volume flows into the system. Agricultural conveyance managers are required to manage, and hold liability for, the water flowing through their systems by state law. Acceptance or unauthorized discharges of stormwater to the conveyances raises flooding risk and results in increased liability exposure for owners/operators. This potential problem is exacerbated by the design of the conveyances which both deliver irrigation water (and become narrower in the process) and drain agricultural lands (becoming wider in the process). Stormwater placed entering the delivery portion of the conveyance system can create substantial flooding risk
- ***Conveyance maintenance difficulties.*** Agricultural owners/operators have established a regular rhythm of annual maintenance activities, with major maintenance scheduled for the non-irrigation season (mid-October through mid-April) when conveyances hold little or no water. Stormwater discharges can cause conveyances to be wet year round complicating the ability of owners to maintain the conveyances for their proper use. Stormwater also places a “24-7” maintenance requirement on the conveyances. For example, the accumulation of snow in agricultural conveyances used for stormwater management can create flooding risk. This drives an increased need for snow removal maintenance beyond that required for strictly managing agricultural water. In addition, the velocity of stormwater (and, therefore, its erosion potential) can be greater than that

of agricultural drainage, increasing the potential for wear and tear on agricultural conveyances.

- ***Short-term planning orientation.*** Irrigation districts and agricultural canals require different levels of maintenance than municipalities such as cities. Listening session participants indicated a belief that urban areas are failing to take a long-term view of the stormwater and drainage management issues they face and are instead looking to the agricultural conveyance system as a “short-term fix.” In this context, participants expressed the need for urban stormwater managers to first examine and address the deficiencies in their own systems and then devise long-term plans for taking responsibility consistent with sensible management and the needs and interests of agricultural conveyance owners/operators.
- ***Bridging the gap between interests.*** A long, politically charged history between interest areas has led to stagnation by discouraging joint problem solving and implementation of on-the ground solutions.
- ***Persistent jurisdictional hurdles for innovative solutions.*** Several jurisdictional hurdles were identified as significant challenges in the context of stormwater management. Examples included differences of opinion on who owns/controls stormwater, differences in the water quality requirements imposed on different sources of water, and the challenges associated with changing the status of existing drainage districts (e.g., disbanding) when land use changes fundamentally alter the district’s purpose.
- ***Groundwater recharge.*** Various changes in land use and water management practices are changing the dynamics of groundwater recharge. Listening session participants indicated that, historically, (unlined) agricultural conveyances and techniques such as flood irrigation have been substantial (approximately 60-90 percent) contributors to local groundwater recharge. The conversion of agricultural lands to urban development is substantially increasing impervious surface thereby reducing infiltration and associated recharge. Additionally, owners/operators of agricultural conveyances have been maintaining canals and fixing leaks, while farmers have been changing to lower water use irrigation methods such as sprinkler irrigation systems. Both activities ultimately lead to less water going back into the aquifer. These changes highlight the need for explicit conjunctive management of surface and groundwater. Participants did acknowledge that the state is working on a recharge program that holds potential for addressing these concerns.
- ***Lack of education.*** Listening session participants identified a lack of education pertaining to stormwater management on the part of the general public in terms of a basic on-the-ground picture of the conveyance system, its intended purpose, and the challenges (i.e., statewide) that drainage managers face. Participants believed the public also needs education on jurisdictional rights, ownership, and maintenance of agricultural conveyance systems, as well as the relationship and distinctions between irrigation water return flows and waters of the United States.
- ***Old vs. new mentality.*** Listening session participants identified a need to highlight the shared nature of the challenges associated with stormwater management, and to create a dialogue about the future coexistence of urban development and agricultural uses of land.

Currently, there is a sense that agriculture is seen as the old paradigm in the process of replacement by urbanization.

- ***Lack of comprehensive long range planning.*** Short-term, patchwork planning currently prevails in the Treasure Valley and surrounding areas. Long-range planning involving all parties and showing the interconnectivity amongst systems is needed. Individual solutions will not be viable in the long-term.
- ***Funding responsibility.*** Managing urban stormwater will impose new financial responsibilities on those who handle it. Currently, there is very limited, and in certain instances no, means to address these responsibilities. This creates a substantial disincentive for agricultural conveyance owners/operators to consider receiving urban drainage into their systems.

Methods and Approaches

After identifying the overarching challenges related to stormwater and drainage management, listening session participants were asked to share potential methods and approaches that could be used to address them. The following list summarizes their thoughts.

- ***Formation of a basin-wide management entity.*** Listening session participants identified the formation of a regional or basin-wide umbrella management entity with some authority over development and the ability to set consistent policies and standards regarding stormwater management. The entity would need an adaptive aspect, a master agreement among jurisdictions, and sufficient authority to:
 - Influence otherwise patchwork development decisions that aren't consistent with basin-wide needs;
 - Develop a funding mechanism (fee) to provide a source of funds for compensating owners/operators to perform needed maintenance and capital projects;
 - Assume liability associated with drainage management;
 - Determine needs and associated management approaches; and
 - Prevent development in the absence of an approved drainage plan.

The entity's efforts would be supplemented by the development of a "best management practices" guide for use by all individual jurisdictions participating in the basin-wide approach. This approach would add value by:

- Requiring Best Management Practices are followed to ensure uniform and consistent treatment of stormwater;
 - Utilizing already completed assessments of water management needs (e.g., Bureau of Reclamation studies);
 - Providing liability protection for the use of agricultural facilities; and
 - Compensating for that use.
- ***Comprehensive long range planning.*** In support of forming a basin-wide drainage management entity, participants identified the need for long-range, big picture, all-inclusive planning. Identified planning needs included:
 - Basin hydrology examination;
 - Current infrastructure inventory;
 - Growth projections;

- Development consequences evaluation (i.e., who's effected, what's effected, in what manner?);
- Cost estimates for addressing management consequences such as property acquisitions, operations and management, liability, and infrastructure; and
- Urban infrastructure examination and changes (e.g., cities examining current systems and exploring opportunities for improving capacity to prevent discharges into agricultural systems).

Participants also indicated the potential for drawing on existing work undertaken by the local BAGs and WAGs (Basin and Watershed Advisory Groups) to support such a planning effort.

- **Impact fee use.** Funding support for a basin-wide drainage management entity, according to participants, should come from development impact fees, rather than a tax or other fee applied to all residents. This preference for funding approach derived from a belief that new development needed to fully pay for the infrastructure and other costs created in communities.
- **Education.** Participants indicated a general lack of understanding of historical drainage management and new stormwater requirements and needs have hindered efforts to develop collaborative solutions. There is a need to create a common language as a community which can support more productive and informed dialog. Examples of information that could be shared include:
 - What stormwater is;
 - How the current drainage system works;
 - What role individuals play in the system;
 - Associated financial costs;
 - Regulatory processes; and
 - System ownership and operator needs.
- **Wastewater reuse and recharge initiatives.** Listening session participants indicated the need for explicit focus on opportunities for further wastewater reuse and use of treated stormwater for groundwater recharge. Both of these approaches were seen as critical to addressing potential groundwater supply constraints as more historical sources of recharge are changing.
- **Contractual solutions.** Some agricultural conveyance system owner/operators currently accept urban drainage into their systems, and their experience indicates the need for care with respect to the needed contractual arrangements. Important aspects of these agreements include: prior consultation/approval of development plans to ensure consistency with agricultural conveyance needs/requirements; the use of established guidance on best management practices to establish proper management actions; and clarity on funding needs (e.g., for enhanced maintenance) and mechanisms.

State Role

Several listening session participants believe that a regional or watershed-wide approach to stormwater management will not be possible without a legislative mandate. Participants expressed a need for the creation of a new managing entity, separate from any existing state departments to avoid perceived or actual conflict of interest associated with them. The

watershed-wide entity should be created by the State, but run by locals, and should include a broad approach to comprehensive planning to avoid duplication of efforts, and adequate funding in its charge.

Closing Comments

At the end of the session, participants indicated discomfort with the lack of an opportunity to discuss regional approaches to water and sanitary sewer service provision (listening session agendas for the utility and other government entity meetings included two topics – drainage/stormwater management, and regional approaches to water and sanitary sewer service provision). Participants indicated their belief that this second topic was of equal interest and importance to agricultural irrigation and drainage interests and believed any document to the Legislature that failed to include agricultural perspectives on this topic would be incomplete.

To address this concern, DEQ proposed holding an additional listening session with agricultural interests focused on regional approaches to water and sewer service provision, and noted the opportunity for all listening session participants to review a draft report to ensure it will provide a fair representation of the challenges, issues, and potential approaches associated with the two topic areas. In this context, participants indicated an interest in the ability to submit attributed comments for attachment to any document moving to the Idaho legislature (DEQ indicated that this would be acceptable), requested that the context for the document (that it is not recommendations, consensus based, or provided to support policy formulation) be made clear, and ensure that the scope of the document is strictly limited to that requested by the joint legislative request. DEQ indicated comfort with these requests, and participants supported (some reluctantly) the suggested approach of adding an additional listening session, even as discomfort with the overall listening session approach remained.

Appendix H

Boise Agricultural Interests Meeting Summary ***December 1, 2006 12:30 – 4:30 pm***

Background

The Idaho Department of Environmental Quality, under the direction of the joint legislative Environmental Common Sense Committee, has conducted a series of listening sessions to document the perspectives of different constituencies statewide on the topics of regional aspects of water and sewer services, and stormwater and drainage management. Participants were asked questions about the challenges faced, current approaches to addressing those challenges, possible future solutions, and what role, if any, the state could play, in the context of the two subject areas. The listening sessions were held in Coeur d'Alene, Pocatello, and Boise, and divided into three interest areas: Agricultural interests, utilities interests, and other government interests. In Coeur d'Alene only a utilities interests meeting was held due to the lack of a significant irrigated agricultural presence in the Idaho panhandle, and lack of availability for participation in the government session. Three meetings were held initially in both Pocatello and Boise.

At the end of the first Boise agricultural interests listening session participants indicated discomfort with the lack of an opportunity to discuss regional approaches to water and sanitary sewer service provision (listening session agendas for the utility and other government entity meetings included two topics – drainage/stormwater management, and regional approaches to water and sanitary sewer service provision, whereas the agricultural interests meeting covered drainage/stormwater management). Participants indicated their belief that this second topic was of equal interest and importance to agricultural irrigation and drainage interests and believed any document to the Legislature that failed to include agricultural perspectives on this topic would be incomplete. To address this concern, DEQ held an additional listening session with agricultural interests focused on regional approaches to water and sewer service provision.

This document contains information gathered during the follow-up Boise agricultural interests listening session on December 1, 2006 from 12:30 – 4:30 pm. The information gathered during

the session has been used to produce a thematic summary that will ultimately be rolled into a report, along with the other listening session summaries, and given to the Idaho State Legislature. The information gathered will not be used to inform any policy decisions or create a basis for recommendations.

Overarching Challenges

To begin the listening session, participants were asked to identify what they believe to be the key challenges faced by jurisdictions in the provision of water and sewer services. The following list summarizes participants' thoughts.

1. ***Co-mingled Water.*** The failure of EPA to provide clear guidance on the implications of co-mingled waters in agricultural conveyance systems leaves these operators strongly concerned about receipt of urban drainage and wastewater treatment effluent. There is also concern about the treatment level of effluent discharged into agricultural systems. Participants cited examples where municipalities have looked to discharge treated effluent into agricultural conveyances that will transmit the water for irrigation use, while the treatment plant operators face restrictions on the direct reuse of treated effluent on, for example, city parks and public golf courses. Water reuse is determined by treatment class, and participants believed the treatment requirements are inconsistent.
2. ***Insufficient Capacity.*** Allowing stormwater and treated effluent into agricultural conveyances raises significant concerns about heightening flood risks by introducing short-term, high volume flows into the system. This potential problem is exacerbated by the design of the conveyances which both deliver irrigation water (and become narrower in the process) and drain agricultural lands (becoming wider in the process). Stormwater and treated effluent entering the delivery portion of the conveyance system can create substantial flooding and liability risks. Urban discharges can also significantly hamper winter maintenance regimes. Participants believe there is a need for urbanized areas to increase their own urban drainage capacity.
3. ***Aging Infrastructure.*** Many agricultural conveyance systems are very old, and precede most of the urbanization that has taken place throughout Idaho. Increases in volume and flow due to infiltration of urban runoff and effluent further degrade the system, and require increased maintenance without providing necessary funding.
4. ***Lack of Comprehensive Long-Range Planning.*** Short-term, patchwork planning currently prevails in the Treasure Valley and surrounding areas. Long-range planning involving all parties and showing the interconnectivity amongst systems is needed. Participants believe that individual solutions will not be viable in the long-term.
5. ***Cultural Change.*** Session participants indicated that there is a prevalent misconception that because of the rapid conversion of agricultural land to urban use in the greater Boise area, there is less demand for agricultural irrigation water. To the contrary, session participants indicated that new demand for residential and commercial non-potable water use (including landscape irrigation) emerges with these new land uses. As a result, demand for agricultural conveyance water is not decreasing nor is it becoming more available for alternative uses. A further aspect of this discussion pointed out the “not-for-

profit” nature of agricultural conveyance systems enabling their ability to provide and maintain affordable water provision services.

6. ***Lack of Education.*** Listening session participants identified a lack of education pertaining to water supply and stormwater management on the part of the general public in terms of a basic on-the-ground picture of what’s out there and the expansiveness of the challenges (i.e., statewide) that drainage managers face.
7. ***Mitigation Use.*** Participants indicated that there is an interest in some communities to draw on surface waters that currently are drawn into and flow through agricultural conveyance systems to mitigate aquifer impacts associated with domestic consumption of groundwater. Depending on the location of mitigation efforts, this can raise concerns for agricultural conveyance owners/operators who require certain water volumes and flows in their systems to assure water can be delivered throughout their systems, including the tail end. Diversion of water away from or out of the agricultural conveyance system could reduce volume and flow to the point where water can’t reach tail end customers.
8. ***Concern for Emergent Competitive Disadvantage in the Provision of Water Services.*** Participants expressed concern about the ability of agricultural conveyance owners/operators to compete on an equitable basis with other water service providers. Districts have long provided cost-effective, non-potable water for agricultural uses and, as agricultural land conversion to urban uses has taken place, to residential and commercial users. At the same time, a higher priority has been placed on domestic water provision than on agricultural uses. In this context, as land use conversion results in more residential and commercial customers and municipal water systems provide water service that can include the use of potable water for landscape irrigation and other non-drinking water uses, a potential water supply allocation disadvantage can emerge for agricultural conveyance system owner/operators.

Irrigation/drainage districts also lack the ability to expand their service areas in response to demand for additional services, while municipal water service providers, in the context of municipal annexations, can increase customer base, creating a disadvantage from a customer service standpoint as well. Overall, this leaves agricultural owner/operators concerned that they may lose overall footing in their efforts to continue to provide valuable and cost effective services to both agricultural and residential/commercial customers as the nature of the market for their services diversifies from strictly or primarily irrigated agriculture.

Potential Regional Methods and Approaches in the Context of Identified Challenges

After highlighting the key challenges facing water and sewer provision managers, listening session participants identified regional approaches that have been utilized, or could be utilized in the future, to address those challenges, as well as key associated benefits.

- ***Education.*** Participants believe there is need for increased education on the part of the general public/average homeowner about water conservation, jurisdictional rights, ownership, treatment options, water quality impacts of their activities, maintenance, and flooding of agricultural conveyance systems. Participants indicated that water

conservation may have to become mandatory, but encouraging a “bigger picture thought process” could help to encourage behavioral changes.

- ***Building an Additional Dam.*** Session participants identified building an additional dam, and thereby creating a fourth area reservoir, as a potential regional solution to water provision and flooding in the greater Boise area. Participants believe the dam would meet all of the current and future urban and agricultural water needs.
- ***Adding Capacity to an Existing Dam.*** Participants discussed the possibility of adding four feet of capacity to an existing dam as a means to increase water supply without having to build another dam.
- ***Formation of an All-Inclusive Coalition.*** Participants indicated that the formation of an all-inclusive coalition could be an effective way to facilitate a dialogue between different constituents and break down the “territorial” mentality that currently hampers collaborative efforts. Further, such a coalition would serve as a forum to foster a shared understanding of what needs to be protected and why, and allow different jurisdictional entities to break out of the current system of individual project-by-project approval, and into broader, long-range planning. The need for better and more participation from the general public was also identified. Session participants asserted that involving all stakeholders further complicates things, but by doing so, better results are ultimately achieved.

Challenges to Utilization of Regional Approaches

Listening session participants were asked to consider what the potential barriers to further adoption of regional approaches to water and sewer provision. Participants indicated that maintaining individual jurisdictional autonomy is a key challenge because all water conveyance managers believe they are doing a good job managing the resource, and have differing perceptions of what management should look like. Participants also said that concerns about water quality and quantity would have to be addressed before regional approaches could be successfully implemented. Further, they asserted that a concerted commitment to action on the part of all parties involved would be necessary, and explained that historically, collaborative ideas have been vetted, but action has not materialized.

State Role

Listening session participants explored a number of ways in which the state could aid communities with regional approaches to water and sewer provision, and also noted difficulties that could likely limit state involvement. Participants indicated that providing examples of successful approaches (e.g., a state-sponsored pilot project with stakeholders working together) would be a powerful way to garner support for regional approaches. Further, participants believe that the state could be more active in terms of educating the general public about water use issues.

Participants also indicated the state should take a role in examining the playing field on which various owners and operators of water provision services operate, and ensure state law and policy does not unreasonably favor one over the other.

Participants indicated that while regional approaches to water and sanitary sewer provision on a watershed or basin-wide scale could be used, the localized nature of many of the issues faced in different areas of the state could make the idea of development of a statewide policy difficult.

Closing Comments

Listening session participants identified coordination, long-range planning, as well as shared understanding in terms of needs, goals, and objectives as key elements that water supply and sewer provision managers are currently lacking. As population continues to increase throughout the state of Idaho, participants believe water supply managers will have to look for new and innovative ways to educate water users and provide incentives for water conservation.