

Final Report

**The Business Community Perspective on Enhanced  
Protection for the Lower Portneuf River  
Valley Aquifer**

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# **The Business Community Perspective on Enhanced Protection for the Lower Portneuf River Valley Aquifer**

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# Executive Summary

For the last eighteen months, BBC Research & Consulting (BBC) has been working for the Idaho Department of Environmental Quality (IDEQ) to examine the potential economic costs and benefits of designating the Lower Portneuf River Valley (LPRV) Aquifer as a sensitive resource. In our September 5, 2001 report entitled *Economic Impacts of Enhanced Aquifer Protection for the Lower Portneuf River Valley Aquifer*, BBC concluded that “even under conservative assumptions...the economic benefits of implementing measures to protect water quality in the LPRV are expected to substantially exceed the costs.”<sup>1</sup>

Our current project on behalf of IDEQ involved interviewing representatives of the Pocatello-area business community to:

- Assess current practices;
- Understand the effect and magnitude of cost increases or savings resulting from potential regulations;
- Provide the business community with an opportunity for input; and
- Relate businesses’ input on costs and impacts to the conclusions drawn in the September 5 report.

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<sup>1</sup> The entire report is available on the Idaho Department of Environmental Quality’s website at [www2.state.id.us/deq/water/lower\\_portneuf\\_river\\_aquifer.htm](http://www2.state.id.us/deq/water/lower_portneuf_river_aquifer.htm).

## Description of Interviews

The sampling plan for interviews was largely based on a need to interview firms that could describe the potential impacts of the different types of potential regulations (described below) on new or expanded businesses. While the businesses selected for interviews represent a broad cross-section of businesses, they do not represent a statistically valid sample. The types of businesses targeted for interviews were:

- Residential and commercial developers and builders;
- Businesses not currently connected to the wastewater system;
- Businesses that use critical materials; and
- Businesses that might benefit from water quality protection measures.

Of the 50 businesses contacted, BBC ultimately conducted 13 in-depth interviews with local businesses. The group of interviewees that proved to be the most difficult to contact and schedule was residential developers/contractors.

## Hypothetical Regulations

To complete our prior economic impact analysis, BBC had to develop some potential regulatory measures. The challenge is obvious. While the ultimate protection measures in the LPRV under a sensitive resource designation would be locally developed, how can you know how much a change might cost if you do not specify what that change will be? The only aquifer in Idaho that is currently established as a Sensitive Resource is the

Spokane Valley-Rathdrum Prairie aquifer in Northern Idaho. Based on the experience of the Rathdrum Prairie, BBC assumed the following four types of regulations would be imposed in the LPRV aquifer area for purposes of the prior economic impact assessment and current interviews with business.

1. The density of homes relying on septic discharge would be limited to one home per five acres. (With exceptions for contractually specific Sewage Management Agreement areas.)
2. New residential and commercial developments must develop and implement a stormwater management plan.
3. Non-domestic wastewater discharge to the aquifer would be prohibited.
4. Secondary containment would be required for facilities that use critical materials, as defined by the federal government in the SARA III List of Lists, in excess of certain thresholds.

When examining these potential regulations it is important to note two items: 1) if the LPRV ultimately does become designated as a Sensitive Resource, the measures will be established locally and may differ from these assumptions and 2) it has been assumed that all regulations would apply only to new or expanded business operations.

## Interview Results

Though some data were collected, interviewees were, for the most part, unable to specify the financial cost of the hypothetical regulations. Often the answer to the question was, “it depends” on factors such as where a

business is located, existing and necessary grades (for stormwater) and how much and what types of critical material(s) will be stored and used. It was also difficult to quantify benefits to businesses, though the interviews made it clear that some large employers in the area would suffer if water quality were to worsen.

One of the most interesting findings from the business interviews is that, in many cases, the new regulations would not represent a major change from current practice. This is particularly true for the stormwater requirements and the secondary containment requirements as a result of existing laws or regulations and the practices of insurance companies.

During the interviews, business owners or representatives made a number of interesting comments about the balance between costs and benefits of enhanced aquifer protection. As residents of the area, many businesses perceive the importance of clean water. On the other hand, they are concerned that the business community will bear a disproportionate share of the costs. While some businesses recognized a need for “grandfathering” (i.e., applying regulations only to new or expanded facilities), others felt that such a policy was unfair and would fail to address some significant pollution concerns.

## Implications of Business Interviews

Interviews with the business community largely confirm the study team’s previous conclusions that the economic benefits of enhanced protection outweigh the economic costs. In some instances (e.g., stormwater) the interviews helped to specify or identify some additional costs, while in other

cases (e.g., secondary containment) the previous report may have overstated the costs.

While the prior study's evaluation of benefits of water quality protection focused entirely on benefits to households, the business interviews indicate that at least some businesses might benefit substantially from avoiding further contamination of the aquifer, though these benefits cannot readily be quantified or generalized.

Overall, the previous estimate of the magnitude of the annual costs of enhanced protection remains reasonable in light of the additional information brought forth from the interviews.

Finally, the report documents several instances in which proposed regulations might appear redundant with existing regulations or practice. This raises the question of what additional protections can be gained from designating the LPRV aquifer a Sensitive Resource. The answer to this question is purpose and consistency. If policymakers decide that aquifer protection is an important goal, then it is important to have requirements that relate specifically to protecting the ground water. It is not sufficient to rely on the rules or regulations of other entities because those rules can change over time, they can be altered in different circumstances and they might not always be implemented in a way that ensures aquifer protection.

**Section I.**  
**Introduction**

Do the benefits of designating the Lower Portneuf River Valley aquifer as a sensitive resource in an effort to curtail further contamination outweigh the costs? On the one hand, the aquifer is the sole source of potable water for the Pocatello area, some contamination has already occurred (PCE and TCE) and the aquifer is vulnerable due to its geology and surface activities above it. On the other hand, heightened protection measures could have a negative economic impact on the area.

To provide more information about potential economic effects, BBC Research & Consulting (BBC) was hired in October 2000 to estimate the costs and benefits of enhanced protection measures. The results of that study were submitted in a September 5, 2001 report entitled *Economic Impacts of Enhanced Aquifer Protection for the Lower Portneuf River Valley Aquifer*.<sup>1</sup> The conclusion was that “even under conservative assumptions...the economic benefits of implementing measures to protect water quality in the LPRV are expected to substantially exceed the costs.”

BBC based its conclusion on an extensive analysis that began with identifying potential protection measures. We then estimated the administrative costs to implement and manage new protections and the indirect costs to be incurred by residents and businesses to comply with these requirements. Economic benefits from avoiding household costs associated with water quality problems and the avoidance of expensive remediation activities by the public water providers were also analyzed.

BBC’s conclusion was also based on the experience of the Rathdrum Prairie region of Northern Idaho, which has lived with similar measures designed to protect its underlying aquifer for almost two decades. The final section of the September 5 report indicated some areas of uncertainty where further research could be useful. One of these recommendations was for further primary (interviews or survey) research with the LPRV business community to examine the effect of increases in the cost of developing new facilities and the economic development benefits of preserving water quality in greater detail. Such research would also provide additional opportunities for direct input from stakeholders.

In November of 2001, BBC was engaged to conduct primary research with the business community. We conducted telephone and in-person interviews with representatives of large and small businesses across a variety of industries.

One of the additional benefits of this follow-up assignment was the further specification of the enhanced protection measures and the extent to which they represent changes from current practices and requirements. Preparation for the interviews required development of more specific information on how the potential regulations would change the requirements faced by various types of businesses. Further, the stakeholder group that assisted BBC in both studies (the Aquifer Protection Work Group) continues to work on refinements. These additional details are reflected in this report.

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<sup>1</sup> The entire report is available on the Idaho Department of Environmental Quality’s website at [www2.state.id.us/deq/water/lower\\_portneuf\\_river\\_aquifer.htm](http://www2.state.id.us/deq/water/lower_portneuf_river_aquifer.htm).

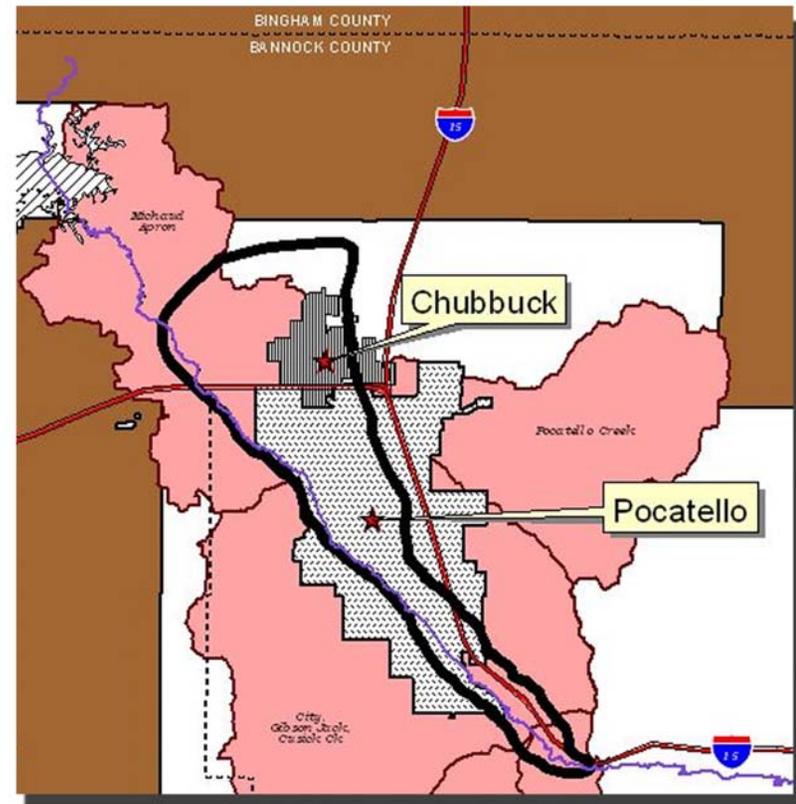
# Introduction

The purpose of this report is to describe the results of interviews with the business community and relate relevant cost and benefit information back to the conclusions drawn in BBC's first report.

The remainder of this report is divided into four sections:

- Defining Sensitive Resource and Potential Regulations — includes detailed information about the projected protection scenario;
- Approach — describes the methodology used to conduct interviews and the types of businesses interviewed;
- The Business Perspective — summarizes the results of interviews; and
- Business Interview Implications — relates the results of the interviews back to BBC's previous work on the economic costs and benefits of enhanced protection.

Exhibit I-1 is a map describing the extent of the LPRV aquifer.



**Section II.**  
**Defining Sensitive Resources and**  
**Potential Regulations**

In preparation for the interviews, BBC had to specifically define the types of changes businesses would likely face for interviewees to be able to describe the potential costs and benefits. At the end of most interviews, business representatives indicated they still had many questions about the process for designating the LPRV as a sensitive resource.

This section describes the Idaho Rules governing aquifer categorization and the specific protection measures assumed for purposes of the economic impact analysis. The purpose of including this information, much of which is detailed in BBC's previous report, is twofold: 1) we wanted this report to be a complete document in and of itself; and 2) we wanted to respond to many of the questions and concerns of the business community, the representatives of which often had not had a chance to review the previous report.

Our intent is merely to describe existing law and possible regulations. We recognize that the possible regulations here could change and that much will depend on the discretion of policymakers. Indeed, the definition of regulations has evolved over the course of BBC's work and we anticipate that it will continue to do so. One of the major benefits to interviewing business stakeholders now is that their insights can help in the definitional process.

## Aquifer Categorization

Under Idaho law, the Board of Environmental Quality (Board) has the authority to adopt rules as necessary and feasible to protect the environment

and health of citizens of the state. The Board is specifically authorized to promulgate a Ground Water Quality Rule, which it has done as Rule 58.01.11 of the Idaho Administrative Code.<sup>1</sup>

According to the Rule, ground water resources can fall into one of three different categories: sensitive, general or other resource. According to Section 350, Sensitive Resource aquifers are defined as follows.

1. The ground water is of better quality than the standards in Section 202 and maintenance of this quality is needed to protect an identified beneficial use(s);
2. The ground water is considered highly vulnerable;
3. The ground water represents an irreplaceable source for the identified beneficial use;
4. The ground water has been degraded and there is a need for additional protection measures to maintain or improve the water quality or prevent impairment of a beneficial use;
5. The ground water is shown to be hydrologically interconnected with surface water and additional protection is needed to maintain the quality of either surface or ground water; and
6. The ground water demonstrates other criteria that justify the need for additional protection.

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<sup>1</sup> The full text of Rule 58.01.11 is available at <http://www2.state.id.us/adm/adminrules/rules/idapa58/0111.pdf>.

Furthermore, activities with the potential to degrade Sensitive Resource aquifers “shall be managed in a manner which maintains or improves existing ground water quality through the use of best management practices and best available methods.” Stricter requirements than those imposed on other aquifers may be imposed for specified constituents (e.g., arsenic, fluoride or chemicals).

The Department of Environmental Quality (Department) or any other person can petition the Board to initiate a rulemaking process to categorize or re-categorize an aquifer. Prior to submission to the Board, any person can seek a preliminary review of the plan from the Department.

Neither the entities responsible for creating and enforcing measures to protect a Sensitive Resource aquifer, nor the exact protection measures to be implemented are identified in Idaho law or regulations. At the time of this report, discussions between the Aquifer Protection Work Group, elected officials and others were on-going to determine the next steps in the local, Pocatello process.

## The Experience of the Rathdrum Prairie

The only aquifer in Idaho that is currently established as a Sensitive Resource is the Spokane Valley-Rathdrum Prairie aquifer in Northern Idaho. Thus, the experience of the Rathdrum Prairie can inform any assessment of potential impacts of heightened protections in the LPRV.

Certain key physical characteristics of the Rathdrum Prairie aquifer are similar to the LPRV aquifer. Both have a high potential vulnerability to contamination from surface and near surface contaminants due to thin and

porous overlying surface material. Both also have a potential for relatively rapid contaminant spreading due to the aquifers’ fast moving natures. As is the case with the LPRV aquifer and the Pocatello area, the Rathdrum Prairie aquifer is the sole source of potable water for the Coeur d’Alene and Spokane area.

**Residential development.** One of the most controversial measures enforced in the Rathdrum Prairie was a prohibition on septic systems for properties smaller than five acres (known as the 1:5 density rule) and the move to Sewage Management Agreements (SMAs). SMAs are contracts between a developer, an existing sewage disposal entity and the local regulatory authority and represent an agreement to provide future sewer system development under specified development progress conditions. At the time that these new requirements were imposed in the Rathdrum Prairie, opponents contended that new homes would be priced out of the market and that the economic impacts would exceed any benefits from such protection measures. Eventually, opponents sued the administrative entity, Panhandle Health District #1, but the Health District prevailed. As of the publication of this report, discussions are occurring in the Rathdrum Prairie about appropriate updates to this rule.

A number of changes have resulted in the pattern of development in the Rathdrum Prairie as a result of the density and SMA requirements. A number of new sewer districts have started and others have been expanded. Residential development has been channeled into urbanized areas and some believe that local planning has been improved and the costs of providing

public sector services to new homes has been reduced.<sup>2</sup> In recent years controversy has subsided, and one could take the rapid population growth in the Rathdrum Prairie area as a demonstration that these requirements did not curtail development.

**Business and industrial impacts.** In the Rathdrum Prairie, the local business community has generally been supportive of the types of stormwater and critical material containment requirements imposed to protect the aquifer. BBC conducted interviews with the local chamber of commerce and economic development agencies in the Rathdrum Prairie (in our previous study dated September 5, 2001) and indications were that there is little or no negative feedback from local firms concerning either the critical materials regulations or stormwater management requirements. Rathdrum protection measures were deemed to have essentially “no impact on efforts to recruit companies” into the region.

One significant concern regarding business impacts was raised by the Coeur d’Alene wastewater utility. The restriction on non-domestic wastewater disposal has reportedly been a problem for a number of pre-existing commercial businesses located in areas isolated from municipal wastewater collection systems. These businesses are effectively prohibited from expanding their operations until they can connect to a sewer system. (See Sections IV and V for discussions of the impact of such a requirement in the LPRV.)

To complete our prior economic impact analysis, BBC had to develop some potential regulatory measures. The problem is obvious. How can you know how much a change might cost if you do not specify what that change will be? BBC answered this question by relying on the experience of the Rathdrum Prairie. Exhibit II-1 on the following page describes the Rathdrum Prairie programs and goals. With the exception of wastewater land application, which is not relevant to the LPRV because wastewater is disposed outside of the aquifer area, the wastewater, stormwater and hazardous materials programs are especially relevant to the LPRV.

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2. *Rathdrum Prairie Aquifer Protection Project: Ground Water Quality Technical Report No. 12.* Idaho Department of Environmental Quality, 1999. Study team interview with Ken Lustig, Environmental Director for PHD#1, 2001.

# Defining Sensitive Resources and Potential Regulations

**Exhibit II-1.  
Protection Measures Utilized in the Rathdrum Prairie Sensitive Resource Aquifer**

<i>Program</i>	<i>Program Goals</i>
On-Site Wastewater	Limit septic system density: no Aquifer impact (1 to 5 rule) Higher density new development near urban centers (SMAs)
Wastewater Facilities	Wastewater facility plans written for each city/district Construct improvements according to the facility plans Extend sewer lines as needed to eliminate septic system
Wastewater Land Application	Study feasibility of land application over the Aquifer Publish guidelines for land applying wastewater over Aquifer
Commercial Wastewater	Prohibit commercial wastewater discharge to the Aquifer
Stormwater	Inventory all shallow injection wells (dry wells) over Aquifer Develop an Aquifer Stormwater Management Plan Plan implementation, stormwater training and education
Hazardous Materials	Emergency response for hazardous material spills Secondary containment for hazardous materials over Aquifer Household hazardous waste disposal facility
Technical Reviews	Insure new government rules maintain Aquifer protection Review and comment on proposed developments over Aquifer
Scientific Analysis	Develop groundwater model for Aquifer Contract with local Universities for technical analysis and data
Land Use Planning	Update comprehensive plans and zoning ordinances Develop a geographic information system (GIS)
Recharge Areas	Study effects of small aquifers that drain to the Aquifer Write management plans for Aquifer recharge lakes
Drinking Water	Write monitoring waiver justification for Aquifer systems
Public Education	Develop a mass media education program Develop a public school education program Host a national conference on wellhead protection Survey residents to determine education program effect

Source: BBC Research & Consulting.

## Assumed Protection Measures

Based on the experience of the Rathdrum Prairie, BBC assumed the following four types of regulations would be imposed in the LPRV aquifer area for purposes of the prior economic impact assessment and current interviews with business.

- The density of homes relying on septic discharge would be limited to one home per five acres.
- New residential and commercial developments must develop and implement a stormwater management plan.
- Non-domestic wastewater discharge to the aquifer would be prohibited. This means that new or expanded businesses that generate wastewater would have to be hooked up to the wastewater system. The prohibition on non-domestic wastewater would not extend to agriculture.
- Secondary containment would be required for facilities that use critical materials, as defined by the federal government in the SARA III List of Lists<sup>3</sup>, in excess of certain thresholds. The purpose of secondary containment is to prevent the materials from entering the aquifer if spilled.

Each of these measures, and the degree of change from the status quo which they embody, is described in greater detail below. There are two important aspects to these descriptions.

1. If the LPRV ultimately does become designated as a Sensitive Resource, the measures will be established locally and may differ from these assumptions.
2. It has been assumed that all regulations would apply only to new or expanded business operations, reflecting BBC's understanding of the intentions of the Aquifer Protection Work Group. In the Rathdrum Prairie most regulations were also applied to existing businesses, though such businesses were sometimes given an extended period of time in which to comply.

In short, BBC has tried to define potential protection measures, or new regulations, as specifically as possible. However, there are inevitably some uncertainties in any such exercise. The exact regulations and the definition of "new" or "expanded" are issues for further refinement during the designation and implementation phases.

**Limitations on use of septic systems.** To reduce future potential contamination from septic and sewer discharge to the aquifer, septic systems could only be installed on home sites five acres or larger. Higher densities could be permitted if the development is in an SMA or if pretreatment systems are installed. Sewage pretreatment systems would be subject to approval by the health district or other regulatory authority and would require periodic monitoring of system maintenance.

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<sup>3</sup> Title III of the Superfund Amendments and Reauthorization Act of 1986.

Currently, the vast majority (99 percent) of new homes built within the cities of Pocatello and Chubbuck are connected to the wastewater system.<sup>4</sup> Thus, a limiting septic systems to home sites of five or more acres would primarily impact those parts of unincorporated Bannock county within the LPRV, which represents about 46 percent of the LPRV's surface area. Existing Bannock County zoning regulations indicate that septic systems can be used on sites smaller than five acres only in areas zoned as Residential Suburban.

**Stormwater management.** New developments larger than a single home (residential developments with more than one home or commercial developments) would be required to develop and implement a stormwater management plan. The local health district or other regulatory authority would register and review all new stormwater disposal systems. The current Best Management Practice (BMP) used in the Rathdrum Prairie requires the development of vegetated swales at the lowest point on the property with an appropriately designed dry well (with a raised casing) in the midst of the swale to capture extraordinary runoff events. Other methods of containing stormwater might be appropriate in the LPRV.

It is BBC's understanding that current practice in the City of Pocatello is to require new commercial developments and some subdivisions to detain a 10 year, three hour storm and treat a two year, 3 hour storm. The City of Chubbuck also requires new residential and commercial developments to build stormwater management facilities. Federal Clean Water Act requirements will be imposed on the Pocatello Metro Area (not yet defined and not necessarily the same as the LPRV area) over the next several years.

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<sup>4</sup> Based on interviews with City staff.

In addition to education and enforcement provisions, the federal regulations will require stormwater management during and after construction.

**Non-domestic wastewater discharge.** Wastewater streams associated with production, cleaning and vehicle washing would be prohibited from entering the aquifer. In practice, this means that new or expanded facilities generating wastewater would need to be connected to the existing wastewater system. Construction costs would vary depending on the distance from an existing sewer line. Connection charges and on-going disposal charges would apply. Pre-treatment of the wastewater stream could be required in some instances. The number of businesses that might be impacted by the prohibition on discharge of non-domestic wastewater is likely to be small, particularly in proportion to the size of the total business community in the LPRV area.

**Secondary containment.** The secondary containment requirements have been, by far, the most difficult potential regulation to describe in detail. There are several reasons for this difficulty:

- The number of critical materials regulated is large;
- The Rathdrum Prairie regulatory entity does not maintain detailed, up-to-date computerized records;

- The LPRV aquifer area has a much more significant industrial base than the Coeur d'Alene area making direct comparisons about the types of businesses to be regulated difficult; and
- Specific requirements for secondary containment are as varied as the types of substances used and the businesses that use them.

In the Rathdrum Prairie, the types of materials subject to regulation are defined as those on the federal List of Lists. The List of Lists is a consolidated list of chemicals subject to reporting requirements under the Emergency Planning and Community Right-to-Know Act, also known as Title III of the Superfund Amendments and Reauthorization Act of 1986, and chemicals listed under section 112(r) of the Clean Air Act. Subcategories of materials include extremely hazardous substances, hazardous substances and toxic chemicals. The list is well over 100 pages long.

Though it is impossible to categorize all of the substances regulated in the Rathdrum Prairie (and presumably in the LPRV), a common sense approach indicates that paints, solvents, fuels, oils, and chemicals are all subject to regulation. By virtue of being on the List of Lists, these critical substances, when used in large quantities, are already regulated by the federal government. In the Rathdrum Prairie, the major difference then is in the threshold quantities that subject a business using these materials to regulation. For extremely hazardous substances, quantities in excess of ten pounds (or one hundred pounds inclusive of solvent or other medium) are subject to secondary containment. For most other substances, quantities must exceed 100 pounds (or one thousand pounds inclusive of solvent or other medium) to be subject to Rathdrum Prairie aquifer protections.

Though it may seem complicated and, and we do not mean to imply that every situation would be simple, the types of substances to be regulated are relatively easily understood by businesses. Large businesses that use critical materials or those that are chemical-intensive tend to use such quantities that they are already regulated. Smaller businesses are already generally aware that oils, fuels and paints must be handled carefully.

Defining the type of secondary containment is as challenging as defining the types of substances to be regulated. Authorities in the Rathdrum Prairie describe a common sense approach that allows each facility to determine the best way of containing spills. As long as Panhandle Health District officials can be assured that spilled material cannot enter the water supply or the ground and that the containment apparatus can hold a sufficient quantity, plans are easily approved.

In most cases, plans filed by businesses are simple letters that can be prepared without outside engineering consultation. There are, however, occasional instances where secondary containment can be much more significant. The most recent, high profile example in the Rathdrum concerned a proposed new railroad refueling depot. The railroad was able to develop a containment plan that exceeded the District's requirements and obtain District approval.

For purposes of interviews with the business community, secondary containment requirements were described as ways to ensure that spilled material cannot get into the water or on the ground. Most interviewees were easily able to understand this simple definition and describe existing or potential methods of compliance.

## Section III. Approach

To further refine the effect of increases in the cost of developing new facilities and the economic benefits of preserving water quality, BBC conducted interviews with representatives of the local business community. The majority of these interviews were conducted in person during the week of November 26, 2001.

## Sampling Plan

The sampling plan for interviews was largely based on a need to interview businesses that could describe the potential impacts of the different types of potential regulations (described in detail in the previous section) on new or expanded businesses. We also sought diversity in terms of large and small firms and businesses located in Pocatello, Chubbuck or the County. While the businesses selected for interviews represent a broad cross-section of businesses, they do not represent a statistically valid sample.<sup>1</sup>

The types of businesses selected for interviews, and the relevant potential regulations, were as follows.

- Residential contractors (1:5 density for septic systems and stormwater management).
- Commercial contractors (stormwater and costs of connecting to wastewater system).
- Businesses that would potentially generate wastewater that are not currently connected to the wastewater system.

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<sup>1</sup> A statistically valid sample typically is not necessary or efficient when conducting research based on key-person interviews.

- Businesses using critical materials. Since there were so many types of businesses likely to use and store critical materials, we focused on gas stations, metal and chemical firms and large manufacturing establishments. This reflects both information from the Rathdrum Prairie on the types of businesses most often subject to these requirements and the broader diversity of the Pocatello area's economic base.
- Businesses that use water intensively in their processes (beneficiaries of clean water).

## Interviews

Joint efforts between the Idaho Department of Environmental Quality and the City of Pocatello produced a list of over 300 potential interviewees. Based on the different rules, a BBC staff member called through the list to schedule interviews. We contacted approximately 50 businesses often leaving multiple messages. BBC ultimately conducted 13 in-depth interviews with local businesses. The group of interviewees that proved to be the most difficult to contact and schedule was residential developers/contractors. We were only able to conduct one such interview.

Exhibit III-1 on the following page provides summary descriptive statistics of interviews. A full list of interviewees is attached as Appendix A. Interviewees were promised that, though their names would be listed, no quotations would be attributed to them directly and BBC's notes would be kept confidential. The interview guides used with the different groups of interviewees is attached in Appendix B.

**Exhibit III-1  
Business Interview  
Summary**

Source:  
BBC Research & Consulting.

<i>Regulation or Benefit Tested</i>	<i>Type of Businesses Interviewed</i>	<i>Number of Firms Contacted</i>	<i>Number of Interviews Conducted</i>
Limit septic systems to residential sites 5 acres or larger. Stormwater management for residential developments.	Residential developers and builders.	12	1
Stormwater management for new commercial facilities.	Commercial developers and builders.	12	3
Prohibit non-domestic wastewater discharge to aquifer.	Businesses not currently connected to wastewater system.	4	1
Secondary containment for critical materials.	Gas stations, metal and chemical firms, large industrial facilities.	26	8
Economic impact of decline in water quality.	Food processing, electronics manufacturing.	2	2

- Notes:
- 1) The list provided to BBC did not distinguish between residential and commercial contractors. A total of twelve businesses listed as general contractors were on the list.
  - 2) BBC had originally planned to interview auto repair shops and several such interviews were scheduled. Upon discovery that the City of Pocatello wastewater system already requires secondary containment for these facilities, these interviews were deemed not to be an efficient use of the interviewee's time and were cancelled.
  - 3) Firms that could speak to the economic impact of a decline in water quality also had information about critical materials. Thus, they are counted in both categories.

**Section IV.**  
**The Business Perspective**

In conducting interviews with the business community, BBC sought to understand more specifically the potential costs associated with designating the Lower Portneuf Valley Aquifer as a sensitive resource and the implications of those costs for businesses. We also wanted to give the business community a chance to express its opinion about the possibility of such regulations.

This section summarizes the central themes described by interviewees. Direct quotations or synopses of interviewee comments provide the reader with a more direct sense of the comments and allow interviewees to “speak for themselves.” Though the main purpose of the interviews was to discuss potential costs and benefits and the implications of those costs and benefits, interviewees often expanded the scope and discussed a variety of concerns regarding existing and potential regulations. These concerns are reported here to ensure that subsequent conclusions, drawn by BBC or by readers, are not biased in any direction.

## Potential Cost of New Regulations

The challenge in determining potential costs to new businesses is that often the answer to the question is, “it depends.” Costs depend on many specific and unique factors such as where a business is located, existing and necessary grades (for stormwater) and how much and what types of critical material(s) will be stored and used.

**Limiting septic systems to 5+ acre sites.** As previously discussed, BBC was not able to conduct interviews with a large number of residential builders or developers. Based on discussions with all interviewees and the experience of the Rathdrum Prairie, it is likely that at least some developers will be initially resistant to this regulation.

On the surface, the requirement would seem to have modest effect in the LPRV. Homes built within the Cities of Pocatello and Chubbuck must be connected to the water and sewer system. City zoning requirements apply to the Area of Impact for Pocatello, which extends into unincorporated Bannock County. Current zoning regulations for Bannock County allow for septic systems on sites smaller than five acres only in areas zoned as Residential Suburban. However, it is apparently not uncommon for variances to be granted and changes to be made to the zoning map. Interviewees indicate that much of the residential building in the area is occurring in the County rather than cities.

There are some concerns about the impact of such a regulation on housing prices. When the cost of land must be spread over fewer homes, the prices of each home obviously increase.

- According to one interviewee, “residential guys cannot afford to build on five acres, it raises the price so much it becomes infeasible to build.”

The idea of a Sewer Management Agreement, under which developers build infrastructure at the same time they build houses and the sewer system is contractually obligated to extend service within a defined period of time, was met with skepticism. Interviewees in the Pocatello area did not believe such a system was practical or could work.

**Stormwater management.** When BBC asked business owners and commercial builders about the cost of building grassy swales, we received the following information. Though some of the cost estimates are large, it is important to note, as discussed later in this section, that these costs are already being incurred by newly constructed businesses.

- A commercial contractor estimated the cost to be anywhere from \$2,500 to \$40,000. The total cost will depend significantly on how much dirt must be moved and the total size of the parking lot.
- Relative to dry wells with separators installed (another technique for managing stormwater run-off), a commercial contractor offered the opinion that grassy swales are typically less expensive. Both techniques require on-going maintenance, though there may be safety issues with a large swale.
- According to another builder, “if you have the land available, the costs of a swale are not that big of a deal. But, if you don’t have the land, that’s when it starts to get ridiculous.”

- One business owner who had recently constructed a swale estimated the costs at approximately \$10,000. This was for a non-vegetated swale, which requires little maintenance. He indicated that a grassy swale would require more maintenance, “I’d either have to mow it or hire someone else to do it.”
- Another owner of a new business said that his vegetated swales added \$20-25 thousand dollars to his construction costs. Furthermore, “you cannot properly use your facility and my swale ends up catching stormwater from other surrounding businesses and the street.”

**Prohibiting non-domestic wastewater discharges.** The practical implication of prohibiting non-domestic wastewater discharges is that new businesses would have to hook up to the sewer system. Costs to do so vary greatly depending on the distance of that business to a main sewer line. In addition to construction costs, businesses generating wastewater must pay for processing and may be subject to pretreatment requirements. It is impossible to predict exactly how many new businesses would want to locate in areas not currently served by the sewer system or how many existing businesses not on the system would want to expand. However, interviews indicate that the total number of businesses in either of these situations would be small. Some specific cost information is as follows.

- According to a commercial contractor, it would cost \$40 per foot to build an 8-inch line. “If you have to go a few hundred feet, this may not be a big deal. But, if you have to go two miles it’s just too expensive. Then you go to Idaho Falls.”

- If a business is located far from a main line, it has to set up a main line of its own. This estimate to build an 8-inch line was approximately \$30 per foot. Manholes would be required every 300 feet and manholes cost \$1,000 each.
- If a business is located near a main line, then it only needs to install a service line. Material costs average \$150 and if the business is located near an alley or any area where digging would be soft, the costs are minimal. If an existing sidewalk or street must be cut, costs can be as high as \$35 per linear foot.
- Hookup fees vary depending on the type of business and the anticipated volume of wastewater, according to the City of Pocatello.
- A commercial builder indicated that almost all new commercial development is on the sewer system anyway since there “really isn’t any new commercial development going on outside of city limits.”

**Secondary containment.** There is considerable variability in how secondary containment requirements might be applied. Much depends on the amount and type of substances to be stored at the new or expanded facility. Generally, business owners did not anticipate a major impact on new facilities, though there were a few concerns.

- A business owner told a story of a recently constructed facility to hold a variety of critical materials. “The Fire Department recommended I put in a containment trap. It was no big deal.”

- A small business owner pointed out that businesses have an economic incentive to avoid spills, “I don’t want to see my money going down the drain.”
- “Insurance companies and our professional association both recommend that we have some type of containment to make sure we don’t spill stuff on the ground.”
- One larger business indicated a concern about the definition of expanded as it relates to critical materials. “If I decide to change from a 50 gallon drum to a 200 gallon drum does that now qualify as an expansion?”
- Another interviewee described how his company’s recent plans to expand were suspended because of Fire Department regulations relative to critical materials. “It was an older building we were looking to buy and it had a lot of wood construction. The requirements from the Fire Department to make it safe to store our critical materials made it too expensive.”

When asked about the impact on a business of filling out a form describing the critical materials used, most businesses said they would comply. However, most owners were very concerned about the imposition of another government form.

- A large business that already files forms with the U.S. Environmental Protection Agency said that “Forms are a pain and there has got to be coordination. You always have that one guy who says its not quite good enough and so we have to do it all again.”

- According to another small business owner, “The less paperwork the better, but another form is not too big of a deal. It’s a pain in the butt, but I’d do it.”
- “Another form would be a problem for me. Once you’ve filled out a form other requirements come along that do cost you money.”

## Potential Benefits of New Regulations

In addition to asking about the cost of potential new regulations, BBC also discussed potential economic benefits from protecting the quality of water in the Aquifer. As was pointed out in our September, 2001 report, “based on national averages, key industries within the study area’s economic base are moderate to high in water use intensity.” These include hotels and other lodging places, educational services, electronics manufacturing and food processing, chemicals processing. When asked about costs their business would incur if the water quality worsened, responses were as follows.

- Several interviewees commented on the fact that the initial cost of installing equipment to process water coming into the facility is significant. “Operating it may not cost me much, but new equipment is a big deal.”
- “If water quality worsens it will increase our costs. We cannot know how much until it actually happens because costs will depend on the contaminants. Perhaps we will have to buy new equipment or

perhaps the equipment will require more maintenance. Or, if there were more organic materials, we would have to do more pretreatment.”

- “If water quality deteriorates below a potable standard, my company might be out of business. If we have to extract solvents, nitrates or minerals it is very expensive and a company like this can just move down the road.”
- Several of the businesses that use water intensively said that they did not have the ability to pass on major cost increases to their customers. “The competition is just too tight and we compete based on price.”
- “A small change in costs would be absorbed and passed on to customers. A large change, who knows? It is a very competitive market and it is very hard to pass on price increases to customers.”

## Magnitude of Change from Status Quo

One of the most interesting findings from the business interviews is that, in many cases, the new regulations would not represent a major change from current practice. This is particularly true for the stormwater requirements and the secondary containment requirements as a result of existing laws or regulations and the practices of insurance companies. Given what interviewees told us about variances and zoning changes, it appears that a strict 1:5 density requirement for septic systems would represent a change for the residential building and development industry.

- “I can’t see how that would have much effect. All the new facilities would have secondary containment anyways. It is a part of building codes now.”
- All new developments use catchment ponds (another type of swale) or something to deal with stormwater, according to a commercial contractor. “I think it is a federal regulation or something. All new businesses have to contain all of their stormwater on site.”
- “New construction is much more attuned to requirements about storing fuels, oils and other potentially hazardous materials. The insurance companies care too.”
- The owner of a medium-sized business commented that his insurance company asks the same type of questions about how he stores his paints and solvents as BBC did during the interview.
- “When I built my new facility, they told me I had to contain all of my storm water on site. That is why I have the swales.”

Though the potential regulations would only impact new or expanded facilities, it is worth noting that many existing businesses using critical materials have practices that would put them in compliance with the proposed regulations. Thus, the expansion conundrum, in which a business cannot expand because it would be so cost-prohibitive to fix the entire operation, may not be a concern for at least some of these businesses.

- “Because of EPA and because we want to be a responsible company, we are already storing everything we use in a way that it cannot get on the ground or in the water supply. We have concrete floors, with special adhesive on them in some places, and dikes designed to catch 110 percent of the amount of material we store.”
- “We’re already regulated for spill prevention. I have concrete floors and no drains in the floor so that I can comply with the wastewater discharge limits.”
- According to an information sheet provided by the City of Pocatello, for all transportation related industries that use the sewer system, “secondary containment is required for all prohibited materials in volumes greater than one gallon. The containment volume should be able to contain 110% of the largest container in the containment area.”

## Regulatory and Government Priorities

BBC did not plan to directly address the issue of priorities, or how best to use limited resources to address water issues, but a few interviewees provided us with comments. When informed that the regulations would apply only to new or expanded businesses, stakeholders had varying reactions.

- “My concern is about focus. If you are worrying about new businesses and prevention, what are you doing to fix current problems?”

- They should focus on enforcing existing regulations before creating new ones. “Why don’t they just fix and enforce existing planning and zoning regulations? That would take care of a lot of the problems.”
- According to another interviewee, grandfathering is a political reality, in some cases it works and in others it does not.
- “It is wrong to grandfather. The problems are the old facilities because the new facilities are built to such high standards that they do not have an issue.”
- “Grandfathering hurts the new guys and creates an un-level playing field.”

## Protect Water Quality: But Who Bears the Costs?

During the interviews, business owners or representatives made a number of interesting comments about the balance between costs and benefits of enhanced aquifer protection. As residents of the area, many businesses understand the importance of clean water. On the other hand, they are concerned that the business community will bear a disproportionate share of the costs. Or, they are concerned that their type of business (small or large) will be disproportionately impacted.

Businesses also tend to have a perception that regulations and taxes are already high in the Pocatello area and that the area is not seen as “business-friendly.” They are concerned that, even if there is no immediate impact, a sensitive designation will eventually impact their business.

- “We want to take good care of the water too, but we want to do it without spending a ton of money.”
- “We are a big business. We deal with regulations all the time. It is the small paint shops or those types of businesses that the government should be worrying about.”
- Several businesses made statements similar to the following, “Pocatello not been friendly to business in the past. Fees and taxes are an issue.”
- When discussing stormwater regulations, a business owner exemplified the dual mind-set. “The hazardous waste off of a parking lot is so minimal that it is ridiculous. On the other hand, it doesn’t hurt to plan for future”
- “Big businesses get targeted because we are easy to find. What about the little guy who is violating several environmental regulations,” asked an interviewee involved in the construction business.
- “My large business probably is not going to move. But the little guys, they have the flexibility to pick up and move anytime.”
- “Protecting the Pocatello Aquifer isn’t going to help small businesses. I don’t believe that it isn’t going to cost me money.”
- “If they make it a sensitive aquifer we will be impacted no matter what.”
- “To regulate beyond where we are now, it is borderline now, we can just barely have a profit. We can sit around and breath clean air and drink clean water and starve to death.”

**Section V.**  
**Business Interview Implications**

The purpose of conducting interviews with the business community was to obtain insight into the effects of Sensitive Resource designation, including increases in the cost of developing new facilities and the economic development benefits of preserving water quality. In this final section, we briefly review the economic cost and benefit findings from BBC's previous report and then discuss the implications of the business interviews relative to those findings.

## Impact of Potential Regulations

**Limitations on use of septic systems.** Although most members of the residential development community were unable or unwilling to participate in this project, background research and interviews produced some additional insights into potential impacts from a limitation on the use of septic systems to land parcels five acres or larger.

**Previous conclusions.** In BBC's initial report, it was estimated that 20 to 35 new homes with septic disposal systems would be developed per year in the LPRV area, out of a projected total of 385 to 400 new homes per year. This estimate was based on historical information provided by the local Health District. The "worst case scenario" in terms of potential economic impact was an assumption that all new homes would be connected to the sewer system.

The cost of developing a new home in the LPRV with municipal sewer disposal was estimated to be \$7,700 more than the cost of developing the same home with a septic disposal system. The impact on the average price

of a home in the LPRV was thus calculated to be between .4 and .7 percent, which is less than the effect of fluctuations in year-to-year market conditions.

Homeowners who purchase new homes that would have been on septic systems but are now developed with municipal wastewater hookup would pay an estimated \$850 more per year.

**Business interviews.** Based on interviews and the experience of the Rathdrum Prairie, in addition to concerns about rising costs, residential developers and builders are concerned about the impact of the density requirements on development patterns. Changing the density requirements shift development more towards areas that already have access to the sewer system or are close to existing lines. The effect of promoting more compact development might lead to land use patterns more akin to those called for in the Our Valley, Our Vision planning process. Such changes in development patterns have occurred in the Rathdrum Prairie.

From an economic impact perspective, a change in development patterns does not imply a reduction in housing demand or impose economic costs, though clearly there are winners and losers. Developers and owners of property in areas far from the existing municipal sewer systems might be adversely affected, while those with developable property proximate to the system might benefit.

**Stormwater management.** Stormwater has been more carefully managed in the LPRV in recent years. Many techniques are used, not just the grassy swale approach assumed in this report and BBC's prior economic impact analysis.

**Previous conclusions.** The study team was not able to provide estimates of the costs of complying with stormwater management requirements in our previous report. Based on descriptions of typical approaches to stormwater management in the Rathdrum Prairie, it was estimated that the stormwater disposal requirements could be met with essentially little increase in cost.

**Business interviews.** In interviews with commercial developers and businesses that had recently developed new properties, it became apparent that new business in Pocatello and Chubbuck already have to develop and implement a stormwater management plan. In practice, systems range from grassy swales to non-vegetated swales to injection wells with sump pumps to separate out hazardous materials from the water. The cost of developing these systems varies depending on the amount of grading necessary and the type of facility being built.

Based on the Rathdrum Prairie experience, the study team assumed that stormwater management would be accomplished through use of grassy swales. However, it is important to note that this assumption was made only for study purposes. It is possible that in developing an implementation plan for a Sensitive Resource designation other stormwater management techniques, such as those already in use in the LPRV, could be shown to be appropriate.

If it was determined that grassy swales were the only appropriate method for containing and processing stormwater on commercial properties, then some new businesses would likely incur additional costs and others would not. Higher costs would accrue if it were more cost-efficient to build an

injection well or non-vegetated swale than a grassy swale on a particular site. Interviewees also noted that it would cost more to maintain a vegetated, or grassy, swale than a non-vegetated swale.

**Non-domestic wastewater discharge.** The impact of a prohibition on discharging non-domestic wastewater to the aquifer is one of the most difficult issues to quantify from an economic perspective.

**Previous conclusions.** Sources at the Coeur D'Alene wastewater utility (in the Rathdrum Prairie Aquifer) indicated that the restriction on non-domestic wastewater has been a problem for a number of pre-existing businesses located in areas isolated from municipal wastewater systems. These businesses are effectively prohibited from expanding their operations (or at least the volume of their wastewater disposal) until they can eventually connect to one of the sewer systems in the area.

**Business interviews.** Other than providing approximate estimates of the cost per linear foot for a business to connect to the municipal wastewater system, interviewees were unable to provide much specific information about the cost impacts of this particular potential regulation. Clearly, the impact on new development would be to drive new businesses with the potential to generate wastewater toward developing in areas served by a sewer system. However, interviewees indicated that most new commercial establishments are being located either in areas already served by or adjacent to a wastewater system. Thus, the practical impact on new businesses may be minimal.

Businesses that: 1) are not currently connected to the sewer system; 2) generate non-domestic wastewater; and 3) wish to expand their operation would surely incur costs, but those costs cannot be generalized. Much depends on how close the business is to the sewer system, the type and volume of wastewater generated and the business expansion potential. The exact number of establishments in this situation is unknown, though it is unlikely that a large number of businesses would be impacted.

**Secondary containment.** Secondary containment requirements have the potential to impact many different types of businesses in the LPRV.

**Previous conclusions.** Based on estimates of the number of new businesses established in the LPRV each year and permitting activity in the Rathdrum Prairie, BBC determined that approximately ten new businesses each year would require secondary containment facilities. This was translated into an estimate of five fewer businesses in the LPRV each decade given elasticity and development cost increase data. At average LPRV employment of 13 jobs per business, this would imply about 65 fewer new jobs over the decade, or about five fewer new jobs each year.

**Business interviews.** An important finding from the interview process was that new or expanded businesses might incur little impact from secondary containment requirements. Building codes and other regulations typically already cause new businesses using critical materials to construct or develop secondary containment structures. Many facilities that might expand are already using secondary containment for critical materials. For example, auto repair shops using the Pocatello wastewater system are already required to have secondary containment for critical materials to protect the quality of

water discharged into the system. If such businesses were to expand, the marginal cost of continuing the practices already in place should be minimal to nonexistent.

Nonetheless, secondary containment requirements may be significant for some individual businesses or some new businesses may choose to locate elsewhere. The definition of “expanded” is very important and certainly not all existing businesses located over the LPRV are storing and using critical materials in such a way that they cannot contaminate ground water. While on the whole, compliance costs for expanded businesses may be minimal, some individual businesses might be faced with significant changes in the way they operate and higher costs. An example of an expensive compliance mechanism would be the construction of a permanent structure to protect materials typically stored outside.

## Economic Benefits of Protected Water Quality

In the previous study, BBC was not able to estimate the economic benefits to businesses of protected or even improved water quality. To be conservative, we excluded these benefits from the comparison of the estimated economic costs and benefits of enhanced aquifer protection measures. While interviews with potential beneficiaries did not produce information that could be generalized across the LPRV, it is clear that water quality is very important to several large employers in the LPRV area. Increased water processing costs would negatively impact the competitiveness of these firms and, if serious enough, could lead to the closure of their facilities in Pocatello.

## Conclusions

In the previous BBC report, the study team concluded that, “The economic and financial benefits of implementing the enhanced protection scenario are projected to substantially exceed the costs over the 20-year study horizon.” Benefits were likely to accrue to a broad spectrum of LPRV residents and businesses, though some costs would be concentrated more heavily among certain groups such as new businesses and sectors associated with home building.

As the enhanced protection scenario is focused on preventing water degradation from new activities in the LPRV, rather than addressing existing sources of potential contamination, it can be thought of as an insurance policy against further aquifer degradation. BBC estimated that there would be a period of "investment" during which costs would likely exceed benefits. The previous report anticipated that the "break-even" point might occur about ten years after designation.

Interviews with the business community largely confirm the study team’s previous conclusions. In some instances (e.g., stormwater) the interviews helped to specify or identify some additional costs, while in other cases (e.g., secondary containment) the previous report may have overstated the costs. Overall, the previous estimate of the magnitude of the annual costs of enhanced protection remains reasonable in light of the additional information brought forth from the interviews.

While the prior study's evaluation of benefits of water quality protection focused entirely on benefits to households, the business interviews indicate that at least some businesses might benefit substantially from avoiding

further contamination of the aquifer, though these benefits cannot readily be quantified or generalized. In sum, over the long term the benefits of enhanced protection are likely to substantially exceed the costs.

The business interviews do suggest there will be some resistance to designating the LPRV aquifer as a Sensitive Resource and taking steps to provide enhanced protection. In part, this resistance stems from the possibility that some businesses, such as developers intending to develop higher density residential areas on septic systems in more remote areas, may be disproportionately impacted. General concerns about any additional government intervention or regulation are also a factor.

Finally, we have discussed several instances in which proposed regulations might appear redundant with existing regulations or practice. This raises the question of what additional protections can be gained from designating the LPRV aquifer a Sensitive Resource. The answer to this question is purpose and consistency. If policymakers decide that aquifer protection is an important goal, then it is important to have requirements that relate specifically to protecting the ground water. It is not sufficient to rely on the rules or regulations of other entities because those rules can change over time, they can be altered in different circumstances and they might not always be implemented in a way that ensures aquifer protection. Furthermore, potentially redundant requirements are not in place throughout the LPRV area, as the City of Pocatello appears to have somewhat more stringent requirements. Sensitive Resource designation could be a vehicle for ensuring consistent requirements across the LPRV and over time.

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## Appendix A.

# Appendix A.

<i>Interviewee</i>	<i>Title</i>	<i>Company</i>	<i>Type of Business</i>
Mike Ryan	Owner	Premier Technologies	Metal Manufacturer
Chris Gantz	General Manager	Vopak USA (formerly Van Waters & Rogers)	Chemical Wholesaler
Cheri Hall,	Owner	Amerigo Inc.	Commercial Contractor
Joe Reams,	Owner	Brennan Construction	Commercial Contractors
Milt Slagowski	Plant Engineer & Maintenance	Heinz Frozen Foods	Food Processor
Troy Murray	Director of Site Services	AMI Semiconductor, Inc.	Semiconductor Manufacturing
Staci O'Connell	Environmental Engineer		
Kevin Marshall	Technical Specialist		
Don Moore	Superintendent & Estimator	Bannock Paving Company	Commercial Contractor
Dave Edel	Materials and Equipment Manager		
Earl Pixton	Owner	Pixton Petroleum	Gas stations, Convenience stores, Wholesale distributor
Mike Hoehner	Owner	Steel West	Metal Manufacturer
Charlie Clark,	Executive Assistant to the President	Union Pacific	Railroad
Leona & Blair Long	Owners	Hummingbird Gardens	Agriculture
Bart Armstrong	Owner	Country Home Builders, Premier Properties	Residential Developer, Real Estate
Don Blissner	Owner	Continental Fuel	Gas Stations, Convenience Stores

## **Appendix B. Interview Guide**

BBC is working for the Aquifer Protection Work Group that is made up of the Cities of Pocatello and Chubbuck, the Idaho Department of Environmental Quality and the Idaho Geological Survey. This is a follow-up project to a previous study we did, which estimated the economic and fiscal costs and benefits of designating the Lower Portneuf River Valley aquifer a sensitive resource under Idaho law. Our current task involves interviewing businesses in the affected area to help develop more detailed understanding of the costs and benefits from the perspective of businesses. We will present the results of this phase of our work to the public at a series of meetings in mid-December.

I'd just like to get a little background information about your business to start. How long have you been in business? How many employees? Always located in same place? Do you see business growing, staying same or contracting over next 5 years?

## **Review map, zoning definitions, density and septic requirements**

- How many homes do you currently build each year? Where do these homes tend to be located? How many of these are in areas zoned as residential suburban (just Bannock County)?
- How many of the homes you build in these areas are on septic?
- Can you describe the type of buyers that typically purchase these homes (age, family, income)? How do they differ from buyers of homes with sewer?
- How much does it cost to build a septic system for a home?
- How much does it cost to hook a home up to the sewer system? How much would it cost to build dry sewer lines?
- Show brochure describing costs of septic pretreatment. Do these cost estimates seem accurate to you? Why or why not?
- Do homebuyers consider septic a selling point or a liability?
- Describe SMA. Would homebuyers consider being in an SMA and having dry lines a selling point or a liability?
- Overall, do you see these requirements as having an adverse impact on your business? In what ways?
- Do you think having these requirements for only part of Bannock County would shift development patterns?

## **Explain stormwater requirements**

- What do you currently do to address stormwater disposal? How does this differ with the type or size of development?
- What would the additional cost per home be of the grassy swale approach to stormwater control?
- Do you think homebuyers consider an effective stormwater plan to be a selling point?
- Overall, do you see these requirements as having an adverse impact on your business? In what ways?
- Do you think having these requirements for only part of Bannock County would shift development patterns?

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I'd just like to get a little background information about your business to start. How long have you been in business? How many employees? Have you always located in same place? Do you see business growing, staying same or contracting over next 5 years?

## Review map and stormwater requirements

- What do you currently do to address stormwater disposal? How does this differ with the type or size of development?
- What are the costs of building a stormwater management system using vegetated swale technique? How do costs differ by type of facility?
- Overall, do you see these requirements as having an adverse impact on your business? In what ways?
- Do you think having these requirements for only part of Bannock County would shift development patterns?

## Review wastewater requirements

- To what extent are new commercial developments being build in areas not now served by municipal water or wastewater systems?
- Is availability of municipal wastewater service viewed as an asset or liability by commercial tenants? Does this vary by business/industry type?
- What would it cost (we know it depends on distances, but give us an idea by the mile etc) to build sewer out to a new or expanded facility? If can't, show estimates from city and see if reasonable.
- What would be the implications of these costs to businesses wishing to build or expand?
- Overall, do you see these requirements as having an adverse impact on your business? In what ways?
- Do you think having these requirements for only part of Bannock County would shift development patterns?

## Show some BMPs for secondary containment

- What would it cost to build structures like the ones I've just shown you?
- What level of costs would be enough to change businesses decisions about locating in the Pocatello area (e.g., 5%, 10%)?

# Interview Guide for Facilities Affected by Wastewater Requirements

BBC is working for the Aquifer Protection Work Group which is made up of the Cities of Pocatello and Chubbuck, the Idaho Department of Environmental Quality and the Idaho Geological Survey. This is a follow-up project to a previous study we did, which estimated the economic and fiscal costs and benefits of designating the Lower Portneuf River Valley aquifer a sensitive resource under Idaho law. Our current task involves interviewing businesses in the affected area to help develop more detailed understanding of the costs and benefits from the perspective of businesses. We will present the results of this phase of our work to the public at a series of meetings in mid-December.

I'd just like to get a little background information about your business to start. How long have you been in business? How many employees? Have you always been located in same place? Do you see business growing, staying same or contracting over next 5 years?

## Understanding the business

Confirm that business is not hooked up to wastewater system

- What are some of the reasons your facility is located here? (Tradition, zoning etc)
- Do you see yourself moving or expanding sometime in the next twenty years?
- Can you describe your current water usage? (Source, how much, what used for)

- Does the quality of the water matter to you? (If yes, follow up with questions about costs of degraded water quality)
- Do you currently further treat or process the water you receive from the municipal water system?
  - What types of processing do you currently have to undergo before the water can be used?
  - What is your best estimate of how much this treatment process costs you? (by component if possible)
  - If the water quality was to worsen in terms of xxx insert examples xxx, would your treatment costs increase? By how much?
  - What would be the implications of these increased costs on your business (employment, profit, survival)?
- Can you describe what happens to that water once its used?
- Do you have a collection sump? Is the waste from the sump treated as hazardous waste?

## Describe wastewater requirements noting that they would apply only if new or expanded and describe costs (based on information gathered from sewer district)

- What would you do if you were faced with a situation where, in order to expand, you had to incur the costs of building sewer lines to your facility?

# Interview Guide for Facilities Affected by Wastewater Requirements (continued)

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- Let's say you weren't in this business right now, but you were thinking about getting in. To do so you would incur the costs of building sewer lines in addition to all the other construction and start up costs. What impact would the sewer hook-up costs have on your decision to start a business? What about your decision about where to locate that business?
- Describe pretreatment requirements. What do you think it would cost you to comply with these pretreatment requirements?
- Overall, do you see these requirements as having an adverse impact on your business? In what ways?

# Interview Guide for Facilities Potentially Affected by Critical Materials Requirements or Businesses that May Benefit

BBC is working for the Aquifer Protection Work Group which is made up of the Cities of Pocatello and Chubbuck, the Idaho Department of Environmental Quality and the Idaho Geological Survey. This is a follow-up project to a previous study we did, which estimated the economic and fiscal costs and benefits of designating the Lower Portneuf River Valley aquifer a sensitive resource under Idaho law. Our current task involves interviewing businesses in the affected area to help develop more detailed understanding of the costs and benefits from the perspective of businesses. We will present the results of this phase of our work to the public at a series of meetings in mid-December.

I'd just like to get a little background information about your business to start. How long have you been in business? How many employees? Have you always been located in same place? Do you see business growing, staying same or contracting over next 5 years?

## Benefits of water quality

- Do you use significant amounts of water in your business?
- Does the quality of the water matter to you? (If yes, follow up with questions about costs of degraded water quality)
- Do you currently further treat or process the water you receive from the municipal water system?

- What types of processing do you currently have to undergo before the water can be used?
  - What is your best estimate of how much this treatment process costs you? (by component if possible)
  - If the water quality was to worsen in terms of common contaminants (nitrates, chlorides, sulfates and TDS) or hazardous materials/industrial chemicals, would your treatment costs increase? By how much?
  - What would be the implications of these increased costs on your business (employment, profit, survival)?
- What happens to the water you use? (Wastewater system)

**Usage of critical materials – basically talking about secondary containment requirements for some chemicals or hazardous materials regulated by EPA, have to make sure can't get on ground or in water supply**

Please describe for me the products you produce.

# Interview Guide for Facilities Potentially Affected by Critical Materials Requirements or Businesses that May Benefit (Continued)

- Do you use chemicals, solvents, oils, fuels, etc. in the production process? What is the maximum quantity of these materials that you would store at any given time? (100 lbs exclusive of solvent or other
- medium or more than 1000 lbs. inclusive of solvent or other medium, 10 lbs if extremely hazardous substance)
- Is your usage of these substances regulated from the EPA, Idaho DEQ or other environmental agency? If so, please describe what is regulated and how.
- How are these substances currently stored? How many containers do you use to store these materials? Are these containers above ground or below ground? What is their size (5 gallon or less, 55 gallon drums)?
- How do you handle any spills during storage or during the production process.
- If you were required to submit a form to state officials describing the chemicals you use and their quantities, in other words a form similar to the questions I've just asked you, what would your reaction be? How much staff time do you think it would take to fill out the form? (Have example from Rathdrum available)
- If you were required to store these substances in such a way that they could not enter the soil or surface or ground waters, what would you do differently than you do now? How much do you think such a system would cost you?
- Overall, do you see these requirements as having an adverse impact on your business? In what ways?