

**WYOMING PRODUCED WATER INITIATIVE**  
(Powder River Basin Region)

The Wyoming Produced Water Initiative ("WPWI") is a coalition of organizations and individuals from the agriculture and oil and gas industries whose goal is to improve communications between agricultural and oil and gas producers, and to promote an understanding of the ways in which groundwater produced in association with oil and gas operations ("produced water") can provide a benefit to agriculture producers, wildlife, and the environment while minimizing potential adverse impacts.

The agriculture and oil and gas industries have always been essential to Wyoming's economy, even well before statehood – from the time the first immigrant wagons stopped to grease their axles and the ground was grazed or plowed. We recognize that ours is a semi-arid desert state, and surface water for livestock and wildlife is extremely scarce except along major perennial rivers. By making surface water available in more locations, wildlife and livestock can disperse across a broader area, which allows an opportunity to improve range management, increase stock production, and decrease the risk of overgrazing. In fact, agricultural operations and wildlife in some areas of the state have benefited from, and depended upon, the discharge of produced water for many decades. We recognize that, if the state's laws, regulations, or policies were to discourage or prohibit the discharge of produced water that is suitable for livestock and wildlife, it would have far-reaching negative impacts to agriculture, wildlife, the environment, the oil and gas industry, and our economy.

We recognize that the relationships among landowners in a drainage are complex. Each landowner has a unique vision for his property, and specific needs and desires for water. One landowner's needs and desires for water may not be shared by his upstream or downstream neighbors. The needs and desires of individual landowners should be accommodated to the fullest extent reasonably possible while at the same time recognizing the public, environmental, and economic benefits from supplying water for wildlife and agriculture.

The relationships between landowners and oil and gas producers are just as complex as the relationships among landowners. Oil and gas operations vary significantly depending on geology, topography, regulatory requirements, and the economics of production. Some oil and gas operations do not produce water that is suitable for livestock and wildlife use. In those that do, regulatory requirements, costs, and the topography limit the produced water management options available to the oil and gas producer.

The objective of the WPWI is simply to provide resources and tools that can be used by agriculture operators and mineral producers to resolve issues related to produced water. We recognize that there is no single, "one-size-fits-all" solution for produced water management, and this Initiative does not attempt to mandate one. Just as neighboring landowners do not want a government agency to mandate by whom, where, when, or how a boundary fence may be erected, the WPWI coalition believes it is inappropriate for conflicts associated with produced water to be resolved through environmental regulations or changes in the law. We recognize that solutions crafted among landowners, their neighbors, and oil and gas producers are most likely to promote agricultural production and responsible oil and gas development, and protect water rights. Therefore, the WPWI does not intend to mandate by whom, where, when, or how produced water can be used; rather, the Initiative provides a roadmap and resources that landowners and oil and gas producers can use to resolve issues associated with the use and management of produced water.

## REGULATION OF PRODUCED WATER

All water in Wyoming, including ground water, is the property of the state. The State Engineer and Board of Control have the constitutional authority to regulate all waters of the state. Through the prior appropriation doctrine (a system of permits, or water rights), the State Engineer regulates the *quantity* of water that may be pumped from a well, stored in a stock reservoir, or diverted from a stream channel for beneficial uses, such as irrigation. The State Engineer has the authority to grant water rights in surface water for many agricultural water uses, including livestock reservoir storage, irrigation, and domestic (lawn and garden) uses. However, the State Engineer does not have the authority to grant water rights to agricultural producers for the flow of water in the channel for livestock and wildlife use. Nevertheless, we recognize that the flow of water in the channel is valuable for livestock watering and wildlife uses, and provides numerous benefits to agriculture, wildlife, and the environment.

Often, ground water that is suitable for use by livestock and wildlife is produced in association with oil or gas operations. When produced water meets water quality standards for livestock and wildlife it may be discharged onto the surface and made available for use. Many agricultural producers consider this new supply of water a benefit to their land and operations, so they acquire water rights in wells, stock reservoirs, and irrigation diversions. Landowners take advantage of produced water for use in livestock watering, irrigation, recreation (including game habitat and fish ponds), and industrial purposes.

The State Engineer regulates the appropriation and use of produced water by a variety of methods, including groundwater and surface water permits. In any case, once produced water is discharged to the ground surface where it may commingle with live surface water, it becomes available for appropriation and use as part of the surface water supply, subject to existing priority rights and regulation as a "return flow" (water that is returned to the surface waters of the state, where it is available for subsequent appropriation and use). Downstream landowners acquire the right to use return flows just as they acquire any other surface water right. In fact, most of the surface water used in agricultural operations is return flow from prior, upstream beneficial uses. For example, water in the North Platte River is used seven times before it flows out of the state. Produced water return flows supplement the amount of water available for appropriation and use in the surface water system. Regardless of the manner in which the right to use produced water is acquired, these water rights are protected by the state and are valuable property rights to their owners. We recognize that, in accommodating one landowner's need and desires for water, oil and gas producers cannot interfere with the water rights of other landowners. We encourage landowners who are interested in acquiring water rights in produced water to contact the State Engineer's Office.

Federal environmental laws expressly recognize that, in arid western states like Wyoming, ground water produced in association with oil and gas operations can provide a benefit to livestock and wildlife, and the land they occupy. Therefore, the Clean Water Act and associated regulations allow produced water to be discharged into surface waters when the quality is good enough to be used for agriculture or wildlife. The Wyoming Department of Environmental Quality ("DEQ") administers these federal laws in conjunction with its regulation of discharges to waters of the state, under the WYPDES permitting system. Therefore, the DEQ has the authority to regulate the *quality* of produced water that can be discharged. The DEQ adopts water quality standards to assure that the discharge of produced water will not degrade the quality of the surface water in the receiving stream to such an extent that it causes a measurable decrease in crop or livestock production. The DEQ has water quality standards for livestock and wildlife use of surface water, and prohibits an oil and gas producer from discharging produced water into a stream channel if the produced water does not meet these standards. We recognize that, while the

DEQ requires an oil and gas producer to obtain a WYPDES permit to discharge ground water, no water quality permit is required when agricultural producers discharge ground water from the same well or from other wells in the same geologic formations.

The DEQ's jurisdiction is limited to water *quality*, and the DEQ may not take any actions that limit or interfere with the jurisdiction, duties, or authority of the State Engineer or Board of Control. According to the Wyoming Attorney General, the DEQ has authority to regulate the quantity of water only if the quantity has an unacceptable effect on the quality of the receiving water. However, if produced water meets water quality standards the DEQ does not have the authority to regulate the quantity of water that is discharged. We recognize that the authority and jurisdiction of the State Engineer, Board of Control, and DEQ over water involve complex legal issues. If the landowner or oil and gas producer have detailed legal questions, we recommend they consult an attorney.

## **OBJECTIVES AND DEVELOPMENT OF THE WPWI**

The objective of the WPWI is to provide guidelines and resources that can be used by landowners and oil and gas producers to foster cooperation and resolve conflicts associated with produced water. These guidelines and resources are for voluntary consideration, and this Initiative is not intended to mandate any particular water management strategy or course of action. Oil and gas producers and landowners must determine if the guidelines and resources are feasible, realistic, and timely on an individual basis. However, the goals of the WPWI are to:

- Maintain and enhance surface resources, including land, water, wildlife, and recreation;
- Promote an understanding of how produced water can provide a benefit to agricultural operations, the land, recreation, and the environment;
- Encourage landowners to put produced water to use in their agricultural operations;
- Encourage responsible development of oil and gas; and
- Provide a forum for conflict resolution.

The following organizations worked together to develop and support the WPWI:

- Wyoming Stock Growers Association (WSGA)
- Wyoming Farm Bureau Federation (WFBF)
- Wyoming Wool Growers Association (WWGA)
- Wyoming Association of Conservation Districts (WACD)
- Petroleum Association of Wyoming (PAW)

## **WPWI BOARD**

The WPWI will create one or more Boards to organize and implement this Initiative. Initially, the WPWI will create a Board to implement this initiative in the Powder River Basin (WPWI Board-PRB). WPWI Boards will consist of nine members: one agricultural producer appointed by each of the following organizations: WSGA, WFBF, WWGA, and WACD; four members appointed by PAW; and one member, to be appointed by the other eight members, from the Department of Agriculture and Natural Resource Mediation Program Board or a person from the field of mediation. The WPWI is committed to assist in organizing and implementing this Initiative in other areas of the state as appropriate.

## TECHNICAL REVIEW TEAM

A Technical Review Team consists of three individuals with technical training and/or practical experience in disciplines appropriate to provide information to assist the parties in addressing the challenges and opportunities associated with produced water management. The WPWI will develop and maintain a list of individuals with appropriate technical expertise from which the Board will assign teams. (See Guideline 3).

## GUIDELINES, RECOMMENDATIONS, AND RESOURCES

1. GUIDELINE OBJECTIVE: Improve communication and foster an understanding between landowners and oil and gas producers, while encouraging the support of regulatory agencies. We recognize that an open dialog between the parties in the development and implementation of a water management plan fosters an understanding of their respective rights, needs, and interests while reducing the likelihood of litigation and additional burdens on regulatory agencies.

### RECOMMENDATIONS:

- The oil and gas producer is encouraged to identify landowners who may reasonably be affected by produced water discharges and contact them early in the development of a plan for discharge and management of produced water.
- When possible, the oil and gas producer should identify one individual as the designated company representative to communicate with landowners regarding its plan for discharging and managing produced water.
- A landowner who is concerned that his property may be affected by the discharge of produced water is encouraged to contact the oil and gas producer as soon as possible. The identity of the operating company can be obtained from the WOGCC, and the identity of the producer that holds the lease can be obtained from the title records of the county clerk.
- Both parties must remain flexible and recognize that each plan for produced water management is unique and there is no "one-size-fits-all" management tool.
- The landowner is encouraged to offer to the oil and gas producer a number of produced water management alternatives that identify potential benefits and impacts, and that reasonably reflect the water laws of the state, the legal rights of both parties, and the rights and interests of other landowners and water users in the drainage.
- The landowner must recognize that a plan to discharge and manage produced water must take into account, and comply with, regulatory requirements of the State Engineer, DEQ, BLM, WOGCC, and other state and federal agencies, and thus may require modification from time to time.
- The parties must work together in good faith to identify water management alternatives that optimize the net environmental and economic benefit to livestock and wildlife in the drainage derived from allowing the flow of produced water suitable for livestock and wildlife use.
- The landowner is encouraged to consult with local organizations and agencies to obtain information on how produced water can be managed to maintain or enhance agricultural lands and operations, land, water, wildlife, and recreational opportunities (Guideline 2).

2. GUIDELINE OBJECTIVE: Consult with local organizations, as well as state and federal agencies, to obtain information on how produced water can be managed to maintain and/or enhance agricultural lands and operations, land, water, wildlife, and recreational opportunities. These may include:

- Land values, such as values for sale and lease, recreation, and scenic/aesthetic;
- Wildlife, including populations, species diversity, and habitat;
- Livestock production, including gain, and pregnancy rates; and
- Forage use and production, including animal unit carrying capacity, and reduction in the intensity of grazing of specific range-land and riparian areas.

RECOMMENDATIONS:

- The landowner is encouraged to consult with local Conservation Districts and other organizations and agencies to identify potential benefits and impacts that may result from the discharge of produced water.
- Organizations and agencies that may be consulted include the following:
  - County Conservation Districts
  - County Extension Agents
  - Local Sportsmen, Outfitters, or Hunting Organizations
  - Licensed Real Estate Appraisers
  - Wyoming Department of Agriculture
  - Wyoming Game and Fish Department
  - Wyoming Water Development Commission
  - Wyoming State Historic Preservation Office
  - Wyoming Department of Environmental Quality
  - Wyoming State Engineer's Office
  - Wyoming Oil and Gas Conservation Commission
  - U.S. Department of Agriculture, Natural Resources Conservation Service
  - U.S. Bureau of Land Management, Surface Grazing
  - U.S. Fish and Wildlife Service
  - Army Corps of Engineers, Omaha District

3. GUIDELINE OBJECTIVE: Consult with a Technical Review Team regarding questions or concerns about technical or scientific information. A Technical Review Team will review existing technical and scientific data and provide information that promotes an understanding of the potential benefits and impacts to agricultural operations, land, water, wildlife, and recreational opportunities from the discharge of produced water.

RECOMMENDATIONS:

- A landowner or an oil and gas producer with questions or concerns that require technical or scientific information is encouraged to contact the WPWI Board and request assistance from a Technical Review Team.
- The Technical Review Team will meet and conduct an on-site evaluation with the landowner and oil and gas producer.
- The Technical Review Team will review existing scientific and technical data and serve as a technical resource to both the landowner and the oil and gas producer.

- The landowner and oil and gas producer are encouraged to provide relevant data and information to the Technical Review Team.
- The Technical Review Team will not negotiate or advocate for either party, and its findings and/or report are confidential and shall not be released without the consent of both parties.
- The parties are not bound by the information received from, or opinions offered by, the Technical Review Team.
- The fees and costs of the Technical Review Team will be paid by \_\_\_\_\_.
- If the WPWI Board determines the landowner's request is outside the scope of this Initiative, or if the WPWI Board or the Technical Review Team determines that there is inadequate existing data from which to respond to the landowner's request, then the WPWI Board may suggest that the landowner retain a qualified consultant.
- Should a conflict arise regarding the discharge and management of produced water after the Technical Review Team has conducted its review, then the landowner and oil and gas producer are encouraged to enter into mediation (Guideline 4). The parties may agree to enter into mediation prior to seeking the assistance of a Technical Review Team.

4. GUIDELINE OBJECTIVE: If a conflict still exists after the Technical Review Team has conducted its review and served as a technical resource, then the landowner and oil and gas producer are encouraged to pursue mediation. Upon request by the parties, the WPWI Board will provide a qualified mediator from the Wyoming Department of Agriculture Natural Resource Mediation Program, or another qualified mediator.

In the mediation process, the mediator simply facilitates communication between the parties. In other words, the mediator assists the parties in identifying the specific issues in dispute, and in communicating their respective positions on those issues. All discussions, offers, and documents in the mediation process are confidential and, if the mediation is unsuccessful in resolving the conflict, the parties are not bound by any statements, proposals, or offers made during the mediation.

RECOMMENDATIONS:

- A landowner and oil and gas producer should contact the WPWI Board to request the assignment of a qualified mediator. The WPWI Board will contact the Wyoming Department of Agriculture Natural Resource Mediation Program, and notify the parties of the name and contact information for the mediator.
- The mediator will contact the parties within 7 days of assignment.
- Once a mediator is assigned, the parties are discouraged from taking any other actions until the mediation process is concluded.
- The first meeting between the mediator and the parties should occur within 20 days after the mediator contacts the parties.
- The landowner and oil and gas producer must participate in good faith in the mediation, and provide relevant information and data to the mediator, including the information provided by the Technical Review Team.
- The mediation process should be completed within 60 days after the first meeting between the mediator and the parties.
- The landowner and oil and gas producer will pay equal shares of the costs of the mediation.

5. GUIDELINE OBJECTIVE: To develop consensus between the agriculture and oil and gas industries on:

- The adoption and implementation of regulations and policies to facilitate the dissemination of relevant information related to produced water management; and
- The resolution of conflicts between landowners and oil and gas producers related to the discharge and management of produced water.

We recognize that produced water can be a valuable asset to agricultural operations, land, water, wildlife, and recreational opportunities, and that there is no “one-size-fits-all” solution to the use and management of produced water. However, we believe it is appropriate that conflicts associated with produced water be resolved in the private sector, rather than through changes in the law or environmental regulations. Solutions crafted through a structured, voluntary process are most likely to promote agricultural production and responsible oil and gas development, while protecting water rights and enhancing wildlife and recreational opportunities.

RECOMMENDATIONS:

- Encourage the DEQ and other regulatory agencies to allow flexibility when regulating the discharge and management of produced water.
- Encourage the DEQ not to take any action that directly or indirectly limits or interferes with the jurisdiction, duties, or authority of the State Engineer or Board of Control, or with existing or potential water rights.
- Encourage the DEQ not to take any actions that directly or indirectly attempt to regulate the quantity of water.
- Encourage the DEQ to recognize through its regulations, policies, and permits that produced water can provide a benefit to livestock and wildlife, and the land they occupy.
- Identify and develop regulations and policies that can improve relationships between landowners and oil and gas producers.

As the WPWI coalition continues its effort to improve this program and enhance communication and cooperation between agriculture and oil and gas producers, we welcome input from our members. We believe this Initiative will deliver significant benefits to our members, as well as the State of Wyoming.