

# Upper Owyhee Watershed Assessment

## III. Issues

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### III. Issues

#### A. Owyhee Watershed Council

To help focus the assessment, the Owyhee Watershed Council developed a list of local concerns which they wished to see addressed in the upper Owyhee watershed assessment. The primary concern was that the assessment be scientifically based, objective, and historically correct. In order to be useful as a tool by the watershed council they wanted the completed document to be written so that it could be read by an average person. The document would compile available data on the watershed, identify data gaps, and review existing watershed conditions. The assessment findings could be utilized locally as an educational tool about the watershed and as the basis for applying for grants that could be used for real improvements to real problems. The document should focus on real issues.

Ranchers and growers understand that watersheds are complicated and include interaction between humans, other species, and the environment. A major concern for ranchers is that the complexity between species interactions, nutrient cycles, and climate can obscure the real relationships between the various elements in the watershed. The assessment of the upper Owyhee subbasin should identify what is known about the subbasin and the gaps in our knowledge about the subbasin.

When assessing the different aspects of the upper Owyhee subbasin, the evaluations of either current or historical conditions need to be made taking into consideration naturally occurring factors such as the climate, the soils, and the geology of the region. Not only should conditions be compared with those that existed at Euro-American contact with Native Americans, but an effort should be made to document recent changes, both improvements and problems.

## **B. Development of issues and concerns to address**

One meeting of the Owyhee Watershed Council was used to develop a set of specific issues and concerns of the members of the watershed council. Other issues emerged from publicly advertised meetings. These meetings were held in Owyhee County, Idaho and Malheur County, Oregon. The meetings were primarily attended by ranchers. The stakeholders who provided input included ranchers with both private land and public grazing allotments in the upper Owyhee subbasin. A list of issues was developed from the discussions at these meetings. Interested individuals also expressed their concerns in informal conversations with the authors.

Many agency concerns are a matter of public record. In addition, the Owyhee Irrigation District provided specific information.

## **C. Specific issues arising from public input**

### **1. Land Ownership**

Almost all of the upper Owyhee subbasin in Idaho and Oregon is BLM land. Allotment holders are constrained in the improvements which they can make.

### **2. Identification of phenomena not open to remediation**

#### ***a. Water temperature and quality***

The Idaho Department of Environmental Quality (DEQ) has completed an assessment and an identification of the total maximum daily load (TMDL) of the Upper Owyhee Watershed in Owyhee County. Stakeholders expressed concern that given the high naturally occurring summer temperatures that the temperatures established in the Idaho document were unrealistic. They feel that an effort needs to be made to identify the conditions which really exist in the streams under natural conditions. What water temperatures can be expected due to natural thermal heating?

Stakeholders are concerned that the targets for temperature and other elements need to be made attainable and realistic.

#### ***b. Topography***

Concern was expressed that some of the implicit expectations for the upper Owyhee subbasin are based on generalizations that are not applicable. One of these expectations is that streams will be curvy, meandering through the landscape. Curvy streams are typical in relatively flat, geologically old, highly developed landscapes; most of the upper Owyhee subbasin is in geologically young formations.

Another problem is that streams like Blue Creek are impacted by heavy runoff. Since Blue Creek is sandy and about 20 feet below the surrounding landscape through some reaches, with heavy runoff it washes out.

### **3. Water supply**

Water supply is critical to land owners. Wildlife, agriculture, livestock, and vegetation all rely in different ways on the availability of water.

In many areas water wouldn't make it to the Owyhee River except in springtime without the dams. In some tributaries water only runs with snow melt, and without dams and stock ponds there would be no water for livestock or wild animals during the rest of the year. In flatter sections of the landscape, spring runoff would spread out across the landscape and dissipate.

In the Idaho section of the upper Owyhee subbasin, most "live" water is on deeded ground.

#### **4. Stock pond documentation**

The stock ponds in the subbasin provide valuable riparian areas. At the time that many of the stock ponds were constructed, no documentation was needed. The only documentation is their presence on old maps. If the stock ponds wash out ranchers want to ensure that they could be reconstructed. If they aren't reconstructed, the riparian area is lost.

Stakeholders also are concerned that stock ponds are in danger of being fenced off, thus limiting access by both stock and larger game.

#### **5. Weeds**

Invasive weeds are of fundamental ecological importance. A number of very aggressive weed species have the potential to replace almost all native plant species at many sites. Invasive weeds can alter or destroy the entire natural web of life including grasses, wildflowers, insects, rodents, birds, grazing animals, and predators. Pollinators can depend on a series of wildflower species, and the pollinators can be lost or greatly weakened from the landscape with the advance of weeds.

Noxious weeds and invasive species are spreading into areas that have largely been free of them. The principal invasive species of concern in the Idaho section of the subbasin is white top as it seems to be spreading rapidly.

Following the Shoofly fire, nonnative thistles began appearing in the Idaho section of the upper Owyhee subbasin north of Duck Valley Indian Reservation.

On the western side of the Idaho part of the subbasin, there is considerable juniper encroachment. Studies have shown that juniper utilizes more water than the vegetation it replaces. The amount of water in creeks, where juniper has spread into the drainage area, is greatly diminished or the surface flow is completely eliminated. The effect of juniper upon the vegetation and hydrology is further discussed in the range section.

Stakeholders are concerned about the spread or danger of spread of medusahead rye, halogeton, tamarisk, leafy spurge, and other noxious weeds.

#### **6. Fire danger**

A large build up of fuel in the uplands leads to a greater danger of fire and subsequent erosion following hot fire events.

## **7. Fish**

Many nonnative fish species have been introduced into the reservoirs and streams of the upper Owyhee subbasin. Nonnative fish compete with native fish for habitat and sometimes replace the native fish. When fish species are closely related, there has been concern that there could be hybridization of the nonnative and native species.

Although a native fish may exist in streams in the upper Owyhee subbasin, not all streams will support that specie of fish. Some streams are intermittent with no water in them at some times of the year. Other streams will have temperatures which are outside the range that a specific specie tolerates.

## **8. Endangered species**

There is concern that a casual attitude toward amphibians among the general populace results in the collection and use of these species as pets. When the pets are released to new environments, they compete with the species native to that environment and spread amphibian diseases.

Stakeholders are concerned that movement of water, boats, or fish will introduce zebra or quagga mussels into the watershed, jeopardizing native species and human water systems.

## **9. Recreation**

Although less heavily used for recreation than some BLM land, the upper Owyhee subbasin provides opportunities for hunting, fishing, camping, and rafting. Access is either through private land or across multiple grazing allotments.

Since most access in the Idaho section of the subbasin is through private land, ranchers have found that people who have requested permission are usually more responsible. Access to several of the BLM reservoirs used for fishing is across private land.

Recreationists have the potential to impact areas beyond the maintained roads.

There is rafting down Deep Creek from Mudflat Road and rafts put in at Crutcher Crossing go downstream toward Three Forks. This route has a very limited season.

## **10. Legacy mining**

Mining for gold, silver, copper, and mercury have disturbed the landscape. Residual effects remain with few monetary resources for remediation. Mercury is known to be detrimental to the fauna of an area.