

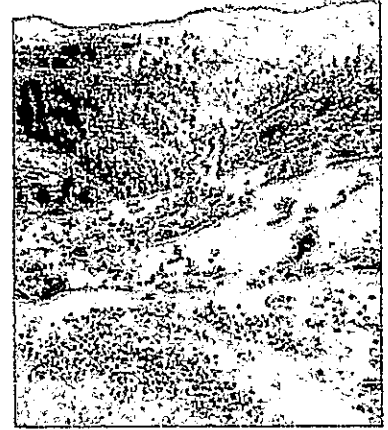
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- ← Idaho Water Resource Board
- ← Water Planning
- ← Comprehensive Basin Planning

South Fork Clearwater River Basin

The South Fork Clearwater River Plan was adopted by the Idaho Water Resource Board in 2004 and approved by the legislature in 2005.

The South Fork Clearwater River basin has two distinct parts. The northwestern portion, the Camas Prairie, is rolling plateaus and prairies, and a major dry land agricultural area of the State of Idaho. It accounts for about 20% of the basin's land area. The eastern portion is forested, mountainous and sparsely populated with about 68% of the land area within the Nez Perce National Forest.

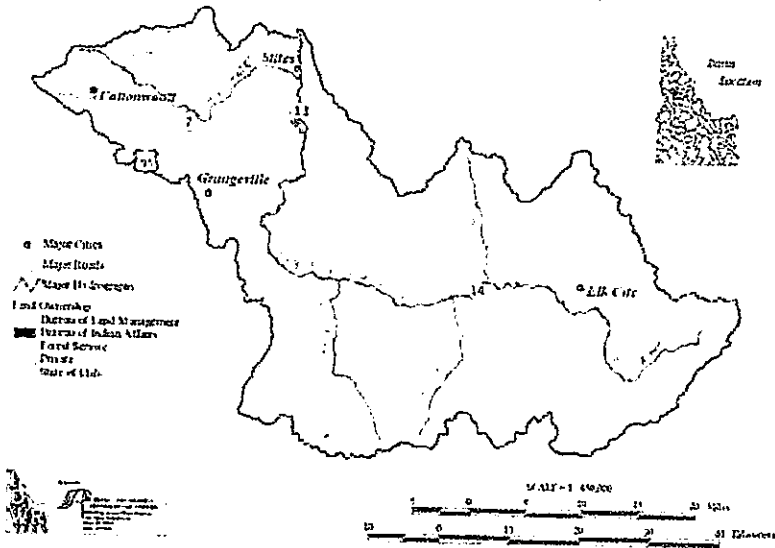


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*Privileges
&
community
given to members
using a recreational
size section dredge -*

(click to enlarge)

South Fork Clearwater River Basin



III. Issues, Analysis and Considerations

3.1 ISSUE: Recreational dredge mining

A. Issue Statement: Recreational dredge mining permit/regulation process is adequate in the South Fork Clearwater River basin.

Discussion

Recreational dredge mining is defined as mining with power sluices, small recreational suction dredges with a nozzle 5 inches in diameter or less and equipment rated at a maximum of 15 horsepower. Recreational dredge mining is regulated in Idaho under the Stream Channel Protection Act. This statute requires dredge miners to obtain a permit from IDWR before recreational dredge mining can be started. The state's One Stop Recreational Dredge Mining Permit does not require a National Pollution Discharge Elimination System (NPDES) permit. State regulations also specify the streams where recreational dredging is prohibited. Suction dredging that is not considered "recreation" is currently considered a (point source) of pollution requiring a National Pollution Discharge Elimination System permit from the U.S. Environmental protection agency. Recreational dredge mining is only allowed on the mainstem South Fork Clearwater River. Due to budgetary constraints of the Stream Channel Unit of the Resource Protection Bureau at IDWR, and to possible dredge mining limitations from the TMDL for the South Fork Clearwater River, current management and regulation of recreation dredge mining on the South Fork Clearwater River may be changing in 2005.

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EXEMPTION
BY EPA
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Idaho
39-3611
at (3)

- The State of Idaho forbids use of recreational dredges within 500 feet of a developed campground, and the USFS prohibits their use in national recreation areas and protected rivers.
- Recreational suction dredges or sluices operated properly in a stream channel do not cause a great deal of environmental damage unless they are used in fish spawning beds (redds) at the wrong time of year. Redds could be damaged or totally destroyed by dredging. Eggs of salmonids prior to the eyed-up stage and sac fry would suffer high mortality if entrained by dredging (Griffith and Andrews 1981).
- Operation of recreational dredges in the South Fork Clearwater River would have some minor impacts on aquatic invertebrates (Griffith and Andrews 1981). Few insects would be killed but some would likely be displaced downstream. Thomas (1985) found lower abundance of aquatic insects in a 35-meter section of dredged stream. Recolonization was complete in a month after dredging.
- The South Fork Clearwater River may be dredged from July 15 to Aug 15 under the Recreational Dredging Permit if request is made on the Special Supplement. The site must also be inspected by IDWR with a fishery biologist. With that authorization, IDWR will issue a letter of approval. The rest of the drainage is closed under the Recreational Dredging Permit, but approval may be granted to dredge in the waters not open under the recreational permit if application is made using form 3804-B (Joint Application for a Permit). The limited season and permits minimize the impacts discussed under the two previous bullets.

ARBITRARY & CAPRICIOUS

Recommendations:

Currently, numerous laws regulate or restrict dredge mining in the mainstem South Fork Clearwater River including the Clean Water Act, the Stream Channel Protection Act, the Endangered Species Act and others. It is unlikely, that a new recreational dredging operation could be conducted in the South Fork Clearwater River without adequate review and environmental safe guards. Therefore, the IWRB does not recommend changing the current recreational dredge mining permit regulation process.

3.2 ISSUE: Declining ground water on the Camas Prairie

B. Issue Statement: Ground water levels near Grangeville and in the Camas Prairie area of the South Fork Clearwater River basin may be declining.

Discussion

Aquifers, subsurface water-saturated formations of fractured rock or gravel, are encountered in the area around Grangeville. Geologists develop an understanding of aquifers and ground water flow patterns by mapping rock outcroppings, reviewing well logs and measuring the depth to water in wells. Pumping ground water can cause a decline in water level in an aquifer. If aquifer recharge is less than loss from discharge and pumping, then the water level will drop.

Castelin did the first work on ground water supply and availability in the Camas Prairie area and found that intricate geology of the area creates a unique environment for the complex movement of ground water (Castelin 1976).

Ralston et al.(1993) found that water level declines in and around the City of Grangeville ranged up to 21 feet per year. Ground water decline in the area was faster than other parts of Idaho. Ground water withdrawals appear to be exceeding recharge in the Grangeville area. Much of the decline was attributed to poor well construction and penetration of multiple aquifers with deep wells. Many of the deep wells were constructed without casings, likely allowing water from the shallow aquifers to drain to lower zones (Ralston, et al. 1993). To address the declining ground water, it was recommended that several deep wells in the area be reconstructed to prevent commingling. In this case, commingling refers to the upper aquifer draining into the lower aquifer. IDWR has hired a consultant to update the Well Construction Standards Rules and to investigate other related issues. In addition, Ralston also recommend that another deep well be drilled by the city. This has been done and the well contributes significantly to the city water supply.

A water system engineering study was prepared for the City of Grangeville (Entranco 2003). Both the quantity and quality of the source of city water is adequate to meet current and projected demand until 2022. Little or no growth is projected for the city and water demand is flat or declining. However, Entranco also recommended that the City of Grangeville continue to monitor the production capacity of its' three sources from the shallow ground water aquifer.

Although ground water levels have declined in the Grangeville area, it is not a critical issue at this time (Ralston 2003). Sometime in the future (25 to 30 years), ground water supply in the Grangeville area could be a significant issue. Ralston (1993) stated that monitoring ground water levels in the Grangeville area would be prudent and recommended in 1993 that a study of ground water be conducted every 10 years.

roads.)

- **Recreational Rivers** may include human development in the waterway or the riparian area.

The IWRB considers the impacts of protected river designations on the social, economic, and environmental well being of the region. A protection designation is made if the IWRB determines the value of preserving the waterway is in the public interest and outweighs development for other beneficial uses (Idaho Code 42-1734A(4)). Under a natural river designation, the following activities are prohibited:

- Construction or expansion of dams or impoundments
- Construction of ~~hydropower~~ projects
- Construction of water diversion works
- Dredge or placer mining
- Alterations of the stream bed
- Mineral or sand and gravel extraction within the streambed

Under a recreational river designation, the IWRB determines which of these activities will be prohibited, and may specify terms and conditions for activities not listed (Idaho Code 42-1734A(5)).

Prohibitions do not interfere with activities necessary to maintain and improve *existing* utilities, roadway systems, managed stream access facilities, diversion works, or *private property*. Natural and recreational designations do not change or infringe upon *existing* water rights or other vested property rights. Existing valid mining claims are property rights and are not obstructed by designations. However, future mining claims that impact the stream channel would be prohibited by a natural designation and could be prohibited by a recreational designation.

As a part of the development of the *South Fork Clearwater River Basin Comprehensive State Water Plan*, streams were identified that will benefit from state protection designation to protect current values for the people of Idaho. Streams that were outstanding in at least two of the three screening categories (biological, recreational, aesthetic) were considered for protection, and were prioritized and selected with significant input from and collaboration with the watershed advisory group, and state and federal agencies.

Potential Effects of Designation

There are potential benefits and costs of designating rivers for protection under state law. Benefits include the maintenance and possible improvement of fish and wildlife habitat, recreational uses, and scenic qualities provided by an intact riverine environment. Economic benefits may come from increased local spending by fishermen, recreationists and other benefits of a healthy river system.

Possible costs, (foregone development), depend on the specific prohibitions and conditions placed on a designated river. On the South Fork Clearwater, this may include foregoing construction of hydropower plants, commercial dredge and placer mining operations, and sand and gravel extraction from the streambed. Timber operations are governed by other state and federal regulations and would not be affected by designation, with the possible exception of some types

of stream crossings. However, designations are not intended to prevent stream crossings for silvicultural or recreational activities that do not harm the stream channel. Dispersed livestock watering would not be affected by designation.

Designated Waters in the South Fork Clearwater River Basin

The IWRB has determined that the value of preserving the designated waterways of the South Fork Clearwater River basin is in the interest of and for the benefit of the state as a whole. All landowners – private, state, and federal – are encouraged to manage their lands consistent with the IWRB's protection designations. The IWRB also encourages federal resource management agencies to work within the comprehensive state water planning process rather than pursuing federal protection of waters within Idaho.

To protect the public interest, current resource use, and the multiple-use character of the basin, the Idaho Water Resource Board designates the following streams and stream segments (approximately 54 miles) as **Natural Rivers** (see Map 3) based upon the analysis from Section IV, Resource Summary and Evaluation. All of the Natural designated rivers in the South Fork Clearwater River Basin are on federal land and most originate in Wilderness areas.

- 1) **Tenmile Creek** - (10 miles) from headwaters to Wilderness boundary and the following tributary:
 - **Williams Creek** - (5.2 miles): Headwaters to confluence with Tenmile Creek,
- 2) **Twentymile Creek** – (3 miles): Headwaters to Wilderness boundary,
- 3) **Johns Creek** - (8 miles): from headwaters to Wilderness boundary, and the following tributaries:
 - **Hagen Creek** - (4.4 miles): Headwaters to confluence with Johns Creek,
 - **Square Mountain Creek** - (5.0 miles) Headwaters to confluence with Moores Creek:
 - **Moores Creek** - (6.4 miles): Headwaters to confluence with Square Mountain Creek,
 - **Gospel Creek** - (6.6 miles): Headwaters to confluence with Johns Creek,
 - **West Fork Gospel Creek** - (5.2 miles): Headwaters to confluence with Gospel Creek,

To protect the public interest, current resource use, and the multiple-use character of the basin, the Idaho Water Resource Board designates the following streams and stream segments (approximately 324 miles) as **Recreational Rivers** (see Map 3) based upon the analysis from Section IV, Resource Summary and Evaluation:

- 1) **Red River** (27.2 miles) Headwaters to confluence with American River, and the following tributaries:
 - **Otterson Creek** - (3.5 miles): Headwaters to confluence with Red River,
 - **South Fork Red River** - (11.7 miles): Headwaters to confluence with Red River,
 - **West Fork Red River** - (4.3 miles): Headwaters to confluence with Middle