

Recreational Panning & Dredging
“Rules of Thumb” on the
Routt National Forest in Colorado

Recreational panning is using non-mechanized equipment such as a pan, sluice box, or pick and shovel without disturbing the earth above the water line of any surface water or outside a dry stream bed.

Recreational suction dredging is using a suction or jet dredge with an intake diameter up to 3 inches and a rating up to 10 horsepower or using hand-operated sluice equipment and related tools. Dredging must occur beneath the existing water surface or upon non-vegetated sand and gravel bars within the active stream channel.

A mining dredge is a device which "vacuums" up water and gravel from a stream or river and then directs the discharge through a riffle box where gold and other heavy objects are trapped. A recreational scale dredge setup commonly consists of a water pump driven by a small gasoline engine and a riffle box. This equipment is floated on inflated tire inner tubes or ridged fiberglass floats. The operator usually will wear a wet or dry type diving suit so that he may spend relatively long periods in the water and maintain a comfortable temperature. In deep water, the operator will be supplied air through a hose from an air pump, thus allowing for complete submersion of the operator.

Every year, we get requests from people wanting to use small dredges to search for valuable minerals on the National Forest. All mineral exploration on National Forest land is regulated under 36 CFR 228.

What we refer to as "recreational dredging" is considered prospecting, and is subject to the same laws and regulations applicable to large mining operations regarding mining laws and environmental laws.

The District Ranger is responsible for determining whether or not significant disturbance is likely to occur. If significant disturbance is expected, a mining plan of operations is required for evaluation and approval before operations may begin.

It is our experience that recreational dredging usually will not result in significant disturbance in most streams under the following circumstances:

1. The dredge has a 3-inch or smaller suction intake, and a 10 horsepower or less motor.
2. Streams are not "Blue Ribbon", "Wild Trout Water", or a stream regulated as "Catch & Release" only (see state fishing regulations for these streams).
3. Camping does not exceed the 14-day stay limit, and all travel management rules and regulations are followed. - All dredging and camping sites shall be accessed by existing roads and trails.
4. Dredging is restricted to July 1 through September 10 to avoid affecting fish spawning habitat.
5. No activities using tracked or wheeled mechanized equipment (e.g., backhoe, dozer, bobcat, power rock saw, or trencher) or explosives can be used.
6. No damming or diversions of streams are allowed.
7. Panning and dredging sites shall not be within 500 feet of a developed campground. In a few instances, campground boundaries and mining claims may overlap. In these cases, the Forest Service office should be contacted.

8. Dredging sites shall not be located within 100 feet of a bridge support, nor should the dredging interfere with any existing habitat improvement structure, stream channel improvements, gauging stations or diversions.
9. Mercury or other processing extractive chemicals shall **not** be used.
10. Care should be taken to completely clean dredges and clothing worn in the creeks to minimize the potential spread of whirling disease and the Zebra Mussel.
11. Practices listed below are followed.

a. **High-Banking:**

- i. High-banking is a frequently used term which may have different meanings. Some people think of high-banking as just moving the processing location (i.e., instead of the water going through a dredge in the stream, the water goes through a sluice box set up outside the stream). Others think of high banking as excavating material from streambanks or other locations outside of a stream or its tributaries to process that material for its gold content. **The latter type of activity is prohibited.**
- ii. In addition, care needs to be taken with respect to high banking in which the sluice box is set up outside the stream.

There are some primary concerns related to high banking. One concern is that the discharged material may not settle within 50 feet of the discharge point. The second concern is that the discharge may cause erosion of the stream bank or land surface. These two concerns are often addressed by digging a small settling hole or series of check dams to slow the discharge and allow settling of solids. However, these holes and dams can be relatively large and, unless reclaimed, remain long after the activity is completed. All settling holes and check dams need to be as small as possible, and **must be reclaimed back to original condition.**

b. **Metal Detectors:**

- i. Use of metal detectors for removal of mineral specimens, with the same restrictions as for panning and dredging (e.g., within the high water line) may be allowed under Non-commercial Recreational Panning & Dredging. However, removal of artifacts or other uses of metal detectors unrelated to non-commercial, recreational searches for precious metals or gems are not allowed under Non-commercial Recreational Panning & Dredging. Those interested in using metal detectors must check with the surface and mineral owners and land management agencies to determine site-specific restrictions and concerns.

If a prospector can't meet all of the above, then we must conclude that significant disturbance may occur, and that a Plan of Operations may be needed.

Whether or not a dredger meets the above "rules of thumb" we request that they fill out the Letter of Intent form and return it to the Steamboat Forest Service office. There are some areas that are not open to mineral exploration, and we can help you identify those beforehand.