

Annex K
Reservoir Revegetation Plan

Table K1 Summary of Revegetation Quantities

Annex K: Reservoir Revegetation Plan

K.1 General

Following reservoir drawdown, action is necessary to encourage to the initial development of native vegetation and control of soil erosion due to wind and rain. The proposed efforts are to accelerate this development rather than to allow years of slow development and detrimental erosion that would otherwise occur.

The work can be grouped into four distinct phases of work.

- Phase I—Initial seeding to be done during the drawdown period, August to October.
- Phase II—Seeding by drill to be performed the following spring. This seeding is to revegetate areas where seed did not take under Phase I
- Phase III—Manual placement of willow- cottonwood-type plantings. This work would be done the second spring following drawdown.
- Phase IV—Annual efforts to reestablish vegetation in problem or disturbed areas. This work would be initiated during the second spring season and continued on a decreasing rate for a period of 10 years.

Details of these efforts are summarized in Table K1.

K.2 Phase I, Initial Seeding

The reservoir drawdown exposes approximately 6,000 hectares (14,000 acres) of stream bank that needs to be revegetated. The exposure of this land mass occurs over a period of 60 days between August and October. As land is exposed, the water saturation level is high. It dries to an unseedable condition within a few weeks. Seeding of this land mass would be done with four seedings at approximately 2-week intervals during drawdown. Each seeding would consist of aerial application of seed and fertilizer, immediately followed by aerial application of a second seed and fertilizer. Helicopter seeding of the upper land mass exposed during the first 2 weeks of drawdown would take place over the full 225-kilometer (140-mile) reach of the river. The second seeding would commence 2 weeks later, followed on a biweekly basis by the third and fourth seedings.

Seed and fuel staging areas could be setup at each dam site at the helipads or on the landing strips and in the Clarkston area. Approximately 48 kilometers (30 miles) of reservoir could be serviced by these staging areas. Given the range and load capacity of a typical helicopter for this use, intermediate staging areas should be considered.

A special seed blend of native plants would be combined with fertilizer for this seeding. In addition, a seeding of annual cereal grain would be made to allow immediate cover development.

Expectations are low that this seeding will result more than sporadic vegetation. Germination of seed during this timeframe coupled with summer temperatures and moisture conditions will severely limit the success of this effort.

K.3 Phase II, Seeding by Drill

This study team assumed that the aerial seeding would only be effective for 50 percent of the land mass. The remaining 50 percent land mass would require reseeding. This work must be done during the spring growing season. Seeding would be done using a no-til drill since broadcast or til seeding is neither effective nor practical. Approximately 2,428 hectares (6,000 acres) would be seeded in this manner. The team assumed that the field effort for this work would be a 1- month period during March or April.

K.4 Phase III, Willow and Cottonwood Plantings

Observation of the erosion and water surface effects during the first and second spring season would allow identification of locations for willow and cottonwood plantings. Once locations were identified, a program to produce plant cuttings and manually plant them would be undertaken. This work would be done following the second spring freshet during the months of September and October. The study team estimated that 100,000 plantings would be required.

K.5 Phase IV, Revegetation

During the second season, a programmed system of vegetation evaluation would be implemented and periodic revegetation efforts performed. Under ideal conditions, this work effort should decrease as vegetation stabilizes on the river banks and the system becomes self-sustaining. However, extreme events could occur requiring intensive effort to remediate.

Table K1. Summary of Revegetation Quantities

	Phase I (helicopter 2 passes)	Phase II (drill)	Phase III (manual)	Phase IV (drill/manual)
Ice Harbor				
Seeding - acres	3,400	1,700		200
Plantings - each	0	0	25,000	10,000
Lower Monumental				
Seeding - acres	2,700	1,350		200
Plantings - each	0	0	25,000	10,000
Little Goose				
Seeding - acres	4,700	2,350		300
Plantings - each	0	0	25,000	10,000
Lower Granite				
Seeding - acres	3,200	1,600		200
Plantings - each	0	0	25,000	10,000