Section 7.0 – Project Implementation

7.1 When to Plant (Planting Seasons)

There are two main recommended planting windows in the Rogue Valley. Plantings may occur in the spring (March through late-May) or in the fall (Late September through November). When seedlings are planted in the late fall, the ground should have adequate moisture and soil temperature should not be below 45 degrees Fahrenheit. Mulch can be added to the planting to help protect from freezing in the winter months. Planting can occur at other times during the year, however irrigation is critical if plantings are going to occur in the summer.

7.2 Planting and Maintenance Work Force

For smaller plantings, local groups including the Natural Resource Youth Corps (NRYC), local scouts, the Job Council, local prison work crewsand school groups can be used as the primary workforce. These groups can also provide provide assistance with maintenance and monitoring. While volunteers and students are important project components, they are also vital for creating community awareness and support for riparian restoration activities.

For larger projects, it is recommended that a landscape contractor or restoration contractor be hired to complete the planting and installation of the irrigation system.

7.3 Maintenance (see Appendix IV for maintenance schedule)

Sites are visited on a regular basis to assess effectiveness of ongoing maintenance and make changes to the plan as needed.

7.3.1 Weed control:

Manual: *March thru July* - weeds (focusing primarily on blackberries, poison hemlock, purple loosestrife and grasses) will be manually removed monthly. Sites are evaluated during this time period to assess effectiveness of manual removal. Additional control methods including use of herbicide applications, biological control methods, mulching, vispor matting and release methods are evaluated at this time.

Herbicides: If herbicides are determined to be necessary they will be applied to site before planting when feasible. If herbicide is needed after planting has occurred, application will coincide with active plant growth and translocation of nutrients to roots. For general weeds application will occur in early spring just after the plant has leafed out in the spring and once again in late summer as needed. For blackberries application will be in late summer or early fall. All

applications will utilize the spot treatment or cut-stump methods.

Weed control will be necessary the first three years or until the trees are established. Control will be reduced to every six months after the first year.

7.3.2 Irrigation

Irrigation systems should be utilized during low water months (typically June through October). The interval between watering is dependent on the available soil moisture and specific plant needs. Drip irrigation systems are recommended if possible. These systems specifically target the plant thereby reducing the amount of competition by weeds. In addition, drips systems use water more efficiently. Components for drip systems are available throughout the valley through local irrigation suppliers and stores including the Grange Co-op.

Where irrigation systems are not installed, there are a several alternatives depending on the location and accessibility of the site. Sites can be watered using volunteer or maintenance crews using buckets, by pumping from local creeks pending obtaining water rights from the creek, or from water holding tanks brought onsite using a water truck or trailer. Plants should be watered a minimum of every two weeks during low water months for the first year and tree gators will be installed as needed. During the first two seasons as the roots begin to develop, the seedlings will require more water than when they become established. In the third and fourth seasons, irrigation will be less frequent. Water need estimations for individual plant species was based on California's Water Use Classification of Landscape Species (WUCOLS III) system.

Maintenance of irrigation systems also need to be included in the project design. Irrigation systems are damaged and break down due to a combination of factors including weather (freezing), animal damage, vandalism, and as part of routine maintenance.

7.4 Monitoring

7.4.1 Pre-restoration: monitoring occurred prior to planting events using the Riparian Characterization form and taking photopoints to supplement quantitative data methods.

7.4.2 Post-planting: sites are monitored for survival, vigor, competition and damage twice (spring and fall) in the first year after planting (see Appendix III for monitoring form and instructions). Post-restoration monitoring will occur once a year (October) for five years, after the first year.

7.4.3 Photopoints: are established at pre-planting surveys and document site conditions during all post-planting surveys.

7.5 Database Development and Maps

All project planting locations should be tracked. Mapping sites using GIS layers is recommended. Different GIS layers should be created corresponding to species,

survivability, animal damage, noxious weed locations and spread, and other factors to create a spatial representation of on-site conditions and an evaluation of the degree to which different influences (e.g., animals, noxious weeds, location to water, ease of access for maintenance) are affecting the success of the project.

Updates of the project include a visual analysis of the success of planting sites through photographs, monitoring summaries, lessons learned, and other information. Reports can be presented and regularly updated through websites. The website uses the GIS base map and will link the data to individual locations on the map. Data and photographs will be able to be viewed by clicking on a location on the map.