

## Site preparation: Purpose & logistics

### *Purpose*

The purpose of site preparation is to create the most favorable conditions possible for the establishment and survival of the plants you will be introducing. From an ecological standpoint site preparation breaks down into three basic tasks;

1. **Managing competition** - controlling competing nonnative and native plant species so that the installed plants survive and establish a resilient plant community resistant to subsequent invasion and competition. Note that native species can be considered 'invasive' in contexts where they form monotypic stands (such as with salmonberry (*Rubus spectabilis*), Douglas spirea (*Spirea douglasii*), willows (*Salix* spp.), red alder (*Alnus rubra*), etc.)
2. **Improving soil conditions** - creating the optimal soil moisture and nutrient conditions for the intended plant community. Note that more is not always better, sometimes it is best to have LESS soil moisture and/or nutrients to benefit the native plant community you desire to establish. Manipulating soil conditions to favor native vegetation is also a means of managing competition.
3. **Mediating disturbance** – removing or significantly reducing the disturbances that lead to the degradation of the restoration site AND preventing or lessening the likelihood of further disturbance that would degrade the intended plant community. Note that the reintroduction of a natural disturbance regime like fire, wind throw, or flooding may be crucial to the intended plant community and that the necessary disturbance may need to be purposefully manipulated and managed to achieve the desired results.

### *Logistics*

**A restoration site is a construction site** and as such the logistics of tasks and materials management must be incorporated into the design and work plan. Remember that the act of restoration in most cases creates disturbance on site and can lead to undesirable consequences such as invasive plant introduction, conditions favoring invasives, soil compaction, soil erosion, altered hydrology, etc. Several key logistical matters to be considered before design implementation are:

#### ☞ **Materials & tools storage**

- Mulch piles
- Cardboard
- Plant staging
- Tools & equipment security

- Geotextiles
- ☞ **Materials & tools transportation to, from, and through the site**
  - Size limits of delivery/pick up vehicles
  - Obstacles to moving to/from/through site
  - Size limits to vehicles moving through site
- ☞ **Conservation of remnant vegetation/habitat**
  - Restricting access
  - Repairing construction damage
- ☞ **Timing of site preparation tasks**
  - Summer soil disturbance tasks
  - Winter planting
  - Spring-fall mowing & herbicide application
  - Mechanical removal of invasives
  - Plant deliveries
- ☞ **Management of erosion and water flow**
  - Post-invasive removal soil protection
  - Post-recontouring soil protection
  - Creek diversion
  - Pond draining/flooding
- ☞ **Debris removal**
  - Garbage storage & removal
  - Invasive biomass storage & removal
- ☞ **Accommodations for workers**
  - Parking
  - Restroom facilities
  - Shelter from inclement weather
  - Food/refreshment location
  - Storage of personal items
  - Training/teaching area