Salmon River Restoration Six Year Status Update

RESTORING KNOTWEED TREATMENT SITES TO THEIR NATIVE COMPOSITION

2012 – 2017

Site Restoration Success

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Today, the Salmon River corridor appears much different than it did prior to the year 2012. As you walk sections of the river banks there is noticeably much less Japanese knotweed (*Fallopia japonica*), a highly invasive plant. Post treatment restoration appears to be working.

Project Implementation

During project implementation, 8.68 acres of knotweed were treated using two herbicide delivery techniques including stem injection and foliar applications. Moderate to excellent suppression occurred at most sites, with eradication occurring at three sites. Today local landowners continue to treat other knotweed populations independently.

Restoration

Since the initial treatment, we have restored several sites by reseeding a total of 51,500 square feet with native grass seed. We implemented a live stake procedure with resident native plant materials achieving a 20% live stake survival rate. We also planted Eastern White Pine (*Pinus strobus*) seedlings at many sites along the stream corridor.

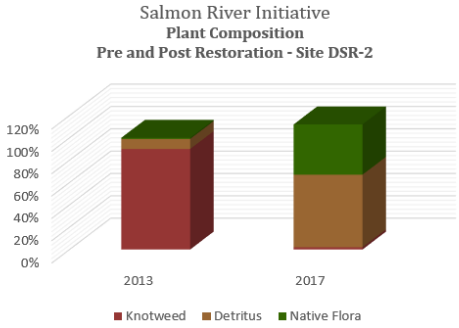
Monitoring

To determine the return of native flora as the result of intentionally restoring treated sites, the Multiple Species Inventory and Monitoring (MSIM) method of site monitoring was incorporated into the project . Three sites were chosen based on soil characteristics and proximity to the stream. Plant species composition surveys are conducted at each monitoring point at least three times per year to include early, mid and late season samples. Monitoring has continued through the year 2017.

Results

Long-term monitoring of several sites indicates continued suppression of knotweed along with sufficient return of plants native to the Salmon River Corridor. On average restored sites show a 98% reduction in knotweed and a return of 45% native cover and 45% detritus ground cover.

Compared to the year 2012, many areas along the Salmon River corridor appear much different revealing more native plant composition, suggesting that our restoration efforts have been successful.



Above

Correlation between native plant composition pre-treatment and post restoration including detritus ground cover. First native plants to volunteer at upstream sites include; jewelweed, smartweed, ferns, grass and maple tree seedlings.

Acknowledgements

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