

Purpose of Soils for Salmon

Soils for Salmon crosses a wide variety of disciplines including hydrology, soil science, waste management, agriculture, development, and landscaping, and thus it is difficult to define one goal.

Fundamentally *Soils for Salmon* is about:

- Improving soil quality
- Improving the health of water quality and quantity
- Recycling organic materials into beneficial resources and closing the recycling loop by using compost to amend disturbed soils.

In addition to supporting healthier fish populations, *Soils for Salmon* promotes these activities:



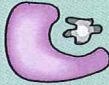
- Water conservation
- Agricultural viability
- Diverting materials from disposal landfills
- Strengthening the market for composted materials.

The Importance of Soil and its Effect on Water Resources

Soil serves a vital function in nature, providing a medium for plant growth as well as nutrients for plants, and habitat for millions of micro and macro organisms. Healthy soil allows them to flourish, release oxygen, hold water and diminish destructive storm runoff, break down waste materials, bind and breakdown pollutants and serve as the first course in the larger food chain.

The disturbance, compaction and degradation of soils impacts the soil structure and reduces its ability to provide these functions. Preserving native soils as much as possible and adding organic amendments such as compost to disturbed soils (prevalent in the urban environment), offer a strategy that allow soils to do their job.

Figure 2. Healthy Soil Functions

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|  Store water and nutrients |  Water flow regulation |  Neutralization of pollutants |
| <p>Much like a giant sponge, healthy soil acts as a storehouse for water and nutrients. The slow release helps plants absorb the correct amount. As a storage reservoir for both water and nutrients, healthy soil has a greater holding capacity than soils that lack sufficient organisms, organic matter and pore spaces.</p> | <p>Like the on/off function of a faucet, healthy soil regulates and partitions water flow, naturally maintaining the water cycle by slowly discharging to streams, lakes and recharging aquifers.</p> | <p>Healthy soil is the site of intensive physical, chemical and biological activity, thus it can prevent water and air pollution. Soil rich in organic matter contains microorganisms that can immobilize or degrade pollutants.</p> |