PORTLAND PARKS & RECREATION

Healthy Parks, Healthy Portland

Ecosystem Management Elements
Presentation 6/18/01

Adaptive Management Loop

- Inventory
- Desired Future Condition
- Assessment
- Prescription
- Intervention
- Monitoring

Inventory *Understanding what we have*

What are the existing conditions?
Is the site part of a larger system?
What are the natural resource functions and values associated with the site or system?
      Research
      Site History
      Geology/ Soils
      Topography/ Aspect
      Land Use/ Easements
      Field Inventory (vegetation, condition, wildlife, uses)
      Site Mapping (GIS)
      Connectivity Analysis

Desired Future Condition *Adopting a target community*

What is the historic community type?
Is the historic community viable?
Should a modified community type be adopted?
      Historic Vegetation Communities
      Historic-current conditions (Have components been substantially altered? Can
            functional values be enhanced?)

Assessment: *What are the significant gaps between the Current and Desired Future Condition?*

What is stressing the site?
What opportunities are available?

What are the priorities for action?

>Stresses (invasive plants, surrounding land uses, erosion, changes in hydrology, human uses – uncontrolled pets, bicycles off trail)
>Opportunities (restoration, enhancement, acquisition)

Prescription: planning for Intervention

What should happen? (active intervention, policy change, monitoring)
How should success be measured? (benefits, criteria for success, measuring and monitoring)
What are the steps related to the action? (who-what-when, public involvement, inter-agency collaboration, consultants, permits, other requirements)
How could the action be funded?

Intervention Actually doing the project
Doing the project (e.g. ivy removal, native planting, acquisition)
Maintaining a record

Monitoring: Recording change and looking for results
Establishing monitoring protocols
Collecting and comparing data
Interpreting results
Loop back to assessment
>Example: in a riparian planting monitor for
>>Plant survival
>>Native species ratio
>>Water temperature
>>Sediment

Outputs
An up-to-date ecosystem inventory
A description of desired ecological conditions
A basis for decision making and budgeting
A detailed record of our interventions
A consistent way to evaluate our work