

The EPA Ecosystem Services Tool Selection Portal

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S1. Overview

In Step 4 (Matching Tools), the user can click on a pop-up link to view the full crosswalk table for each of the three decision pathways. The tables are organized by the steps for a given decision process, then by EPA ES Assessment tool and the role that tool can play (the same task label assists with the “What do you need help doing with Ecosystem Services (ES)?” question asked in Step 3.

Supplementary Table S1. Matching Tools for all Ecological Risk Assessments Steps.

| Ecological Risk Assessments Step | Tool Name | Task Label |
|----------------------------------|---|--|
| 1 - Planning & Scoping | National Ecosystem Services Classification System | Identify potential ES using clearly defined terms and a comprehensive list |
| | Eco-Health Relationship Browser | Identify established links between ES and human health |
| | EnviroAtlas | Map ES and biodiversity at the site |
| | Final Ecosystem Goods and Services (FEGS) Scoping Tool | Identify and prioritize stakeholders and ES |
| 2 - Problem Formulation | National Ecosystem Services Classification System | Identify potential ES using clearly defined terms and a comprehensive list |
| | Causal Analysis/Diagnosis Decision Information System | Create conceptual model for how stressors impact ES |
| | EnviroAtlas | Map ES and biodiversity at the site |
| | Visualizing Ecosystem Land Management Assessments (VELMA) Model | Estimate stressors and impacts on ES |
| | Causal Analysis/Diagnosis Decision Information System | Estimate stressors and impacts on ES |
| 3 - Analysis | EcoService Models Library | Find models for estimating ES |
| | EPA H2O | Map alternative land-use scenarios and ES, and impacts |
| | EnviroAtlas | Map ES and biodiversity |
| | Visualizing Ecosystem Land Management Assessments (VELMA) Model | Estimate stressors and impacts on ES |
| | Causal Analysis/Diagnosis Decision Information System | Estimate stressors and impacts on ES |
| 4 - Risk Characterization | EnviroAtlas | Map ES and biodiversity |
| | Rapid Benefit Indicators (RBI) Approach | Examine ES risks and benefits to compare and communicate decision alternatives |

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| 5 - Risk Communication | EnviroAtlas | Map pollution sources and impacts |
| | EPA H2O | Map alternative land-use scenarios and ES, and impacts |
| | Visualizing Ecosystem Land Management Assessments (VELMA) Model | Estimate stressors and impacts on ES |
| | EcoService Models Library | Estimate stressors and impacts on ES |
| | Causal Analysis/Diagnosis Decision Information System | Estimate stressors and impacts on ES |
| | Practical Strategies (for Integrating Final Ecosystem Goods and Services into Community Decision-Making) | Examine ES risks and benefits to compare and communicate decision alternatives |
| | Rapid Benefit Indicators (RBI) Approach | Examine ES risks and benefits to compare and communicate decision alternatives |
| | National Ecosystem Services Classification System | Identify potential ES using clearly defined terms and a comprehensive list |
| | Final Ecosystem Goods and Services (FEGS) Scoping Tool | Identify and prioritize stakeholders and ES |
| | Final Ecosystem Goods and Services (FEGS) Metrics Report | Identify most relevant and meaningful final ecosystem goods and services metrics |
| | EPA H2O | Map alternative land-use scenarios and ES, and impacts |
| | Eco-Health Relationship Browser | Identify established links between ES and human health |
| | Visualizing Ecosystem Land Management Assessments (VELMA) Model | Estimate stressors and impacts on ES |
| | Causal Analysis/Diagnosis Decision Information System | Estimate stressors and impacts on ES |

Supplementary Table S2. Matching Tools for all Contaminated Site Cleanup Steps.

| Contaminated Site Cleanup Step | Tool Name | Task Label |
|--|--|--|
| 1 - Site Assessment | Final Ecosystem Goods and Services (FEGS) Metrics Report | Identify most relevant and meaningful final ecosystem goods and services metrics |
| | National Ecosystem Services Classification System | Identify potential ES using clearly defined terms and a comprehensive list |
| | Causal Analysis/Diagnosis Decision Information System | Create conceptual model for how stressors impact ES |
| | Final Ecosystem Goods and Services (FEGS) Scoping Tool | Identify and prioritize stakeholders and ES |
| | EnviroAtlas | Map ES and biodiversity |
| | Eco-Health Relationship Browser | Identify established links between ES and human health |
| 2 - Site Investigation and Alternatives Evaluation | Rapid Benefit Indicators (RBI) Approach | Examine ES risks and benefits to compare and communicate decision alternative |
| | Final Ecosystem Goods and Services (FEGS) Scoping Tool | Identify and prioritize stakeholders and ES |
| | EcoService Models Library | Find models for estimating ES |
| | EnviroAtlas | Map ES and biodiversity |
| | Visualizing Ecosystem Land Management Assessments (VELMA) Model | Estimate stressors and impacts on ES |
| | Causal Analysis/Diagnosis Decision Information System | Estimate stressors and impacts on ES |
| | Final Ecosystem Goods and Services (FEGS) Metrics Report | Identify most relevant and meaningful final ecosystem goods and services metrics |
| | Eco-Health Relationship Browser | Identify established links between ES and human health |
| 3 - Remedy Selection | Final Ecosystem Goods and Services (FEGS) Scoping Tool | Identify and prioritize stakeholders and ES |
| | Final Ecosystem Goods and Services (FEGS) Metrics Report | Identify most relevant and meaningful final ecosystem goods and services metrics |
| | EnviroAtlas | Map ES and biodiversity |
| | Practical Strategies (for Integrating Final Ecosystem Goods and Services into Community Decision-Making) | Examine ES risks and benefits to compare and communicate decision alternatives |

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| 4 - Remedy Implementation | Final Ecosystem Goods and Services (FEGS) Scoping Tool | Identify and prioritize stakeholders and ES |
| | National Ecosystem Services Classification System | Identify potential ES using clearly defined terms and a comprehensive list |
| | Final Ecosystem Goods and Services (FEGS) Metrics Report | Identify most relevant and meaningful final ecosystem goods and services metrics |
| 5 - Post-Construction Activities | Practical Strategies (for Integrating Final Ecosystem Goods and Services into Community Decision-Making) | Examine ES risks and benefits to compare and communicate decision alternatives |
| | National Ecosystem Services Classification System | Identify potential ES using clearly defined terms and a comprehensive list |
| | Final Ecosystem Goods and Services (FEGS) Metrics Report | Identify most relevant and meaningful final ecosystem goods and services metrics |

Supplementary Table S3. Matching Tools for all Other Decision-Making Contexts Steps.

| Other Decision-Making Contexts Step | Tool Name | Task Label |
|---|--|--|
| 1 - Clarifying Decision Context | Practical Strategies (for Integrating Final Ecosystem Goods and Services into Community Decision-Making) | Find strategies for identifying relevant ES objectives and impacts |
| | National Ecosystem Services Classification System | Identify potential ES using clearly defined terms and a comprehensive list |
| | Final Ecosystem Goods and Services (FEGS) Scoping Tool | Identify and prioritize stakeholders and ES |
| 2 - Defining Objectives | Practical Strategies (for Integrating Final Ecosystem Goods and Services into Community Decision-Making) | Find strategies for identifying relevant ES objectives and impacts |
| | Final Ecosystem Goods and Services (FEGS) Scoping Tool | Identify and prioritize stakeholders and ES |
| | National Ecosystem Services Classification System | Identify potential ES using clearly defined terms and a comprehensive list |
| | Final Ecosystem Goods and Services (FEGS) Metrics Report | Identify most relevant and meaningful final ecosystem goods and services metrics |
| | Eco-Health Relationship Browser | Identify established links between ES and human health |
| 3 - Developing Alternatives | Practical Strategies (for Integrating Final Ecosystem Goods and Services into Community Decision-Making) | Identify potential ES using clearly defined terms and a comprehensive list |
| 4 - Estimating Consequences | Rapid Benefit Indicators (RBI) Approach | Examine ES risks and benefits to compare and communicate decision alternatives |
| | EPA H2O | Map alternative land-use scenarios and ES, and impacts |
| | Visualizing Ecosystem Land Management Assessments (VELMA) Model | Estimate stressors and impacts on ES |
| | Causal Analysis/Diagnosis Decision Information System | Create conceptual model for how stressors impact ES |
| | EcoService Models Library | Find models for estimating ES |
| | EnviroAtlas | Map people and built spaces |
| | Eco-Health Relationship Browser | Identify established links between ES and human health |
| 5 - Evaluating Trade-offs and Select | Final Ecosystem Goods and Services (FEGS) Scoping Tool | Identify and prioritize stakeholders and ES |
| | Practical Strategies (for Integrating Final Ecosystem Goods and Services into Community Decision-Making) | Find strategies for evaluating ES tradeoffs |
| 6 - Implementing, Monitoring, and Reviewing | Practical Strategies (for Integrating Final Ecosystem Goods and Services into Community Decision-Making) | Find strategies for incorporating ES into monitoring |
| | National Ecosystem Services Classification System | Identify potential ES using clearly defined terms and a comprehensive list |
| | Final Ecosystem Goods and Services (FEGS) Metrics report | Identify most relevant and meaningful final ecosystem goods and services metrics |