

LONG -TERM STEWARDSHIP at the INEEL

**Alice Williams, DOE-ID
U.S. Department of Energy-Idaho Operations Office**



INEEL Environmental
Restoration Program

Long-Term Stewardship at the INEEL

Definition:

All activities required to maintain an adequate level of protection to human health and the environment from the hazards posed by a nuclear and/or chemical materials, waste, and residual contamination remaining after cleanup is completed.



INEEL Environmental
Restoration Program

Long-Term Stewardship at the INEEL

Key Elements of a Stewardship Program:

- Site monitoring and maintenance
- Application and enforcement of institutional controls
- Information management
- Environmental monitoring



INEEL Environmental
Restoration Program

Long-Term Stewardship at the INEEL

CERCLA:

- Cleanup is risk-based (National Contingency Plan (NCP) 40 CFR 300)
- Risk is based on current and future anticipated land use (NCP)
- Residual risk (risk remaining after cleanup) is managed through the use of institutional controls
- Five- years reviews are required for sites where hazardous substances remain on the site above levels that allow for unrestricted use or unrestricted exposure
- CERCLA Section 120(h) places specific requirements for DOE responsibilities prior to and after land transfer
- Hall Amendment (to the National Defense Authorization Act) requires DOE to seek EPA concurrence on lease of DOE land on NPL sites



INEEL Environmental
Restoration Program

Long-Term Stewardship at the INEEL

Institutional Controls (ICs) (Region 10 IC

Policy dated 5/3/99)

- ICs are *any non-engineered restrictions on activities, access, or exposure to land, groundwater, surface water, waste and waste disposal areas or other areas or media.*
- *Any remedy that results in hazardous substances remaining on-site above levels that allow for unlimited use or unrestricted exposure will require some form of institutional controls to ensure that human health and the environment are protected.*
- IC commitments are to be made in CERCLA RODs , RCRA Part B permits, or RCRA Corrective Measures Implementation Plans



INEEL Environmental
Restoration Program

Long-Term Stewardship

CERCLA Remedy Selection and Land Use:

- Land use categories (residential, industrial, etc) serve as proxies for exposure
- Anticipating future land use is no easy task
- Assuring local land use controls are maintained and enforced over time also a difficult task
- To the extent that land use controls are necessary to assure protectiveness, their effectiveness becomes a crucial component of the remedy



INEEL Environmental
Restoration Program

Long-Term Stewardship

INEEL Future Land Use:

- 1995: Future land use scenarios out 100 years developed with stakeholder input
- Future land use scenarios are now incorporated into the INEEL Comprehensive Facility and Land Use Plan (available on internet)
- Current future land use scenarios limited to next 100 years; but stewardship must extend well beyond that period



INEEL Environmental
Restoration Program

Long-Term Stewardship

End State Planning:

- An integrated planning process (a process, not a plan)
- Beginning with the end in mind
- Visualize INEEL in its final condition at the end of DOE control
- Work backwards from end-state to integrate facility closure

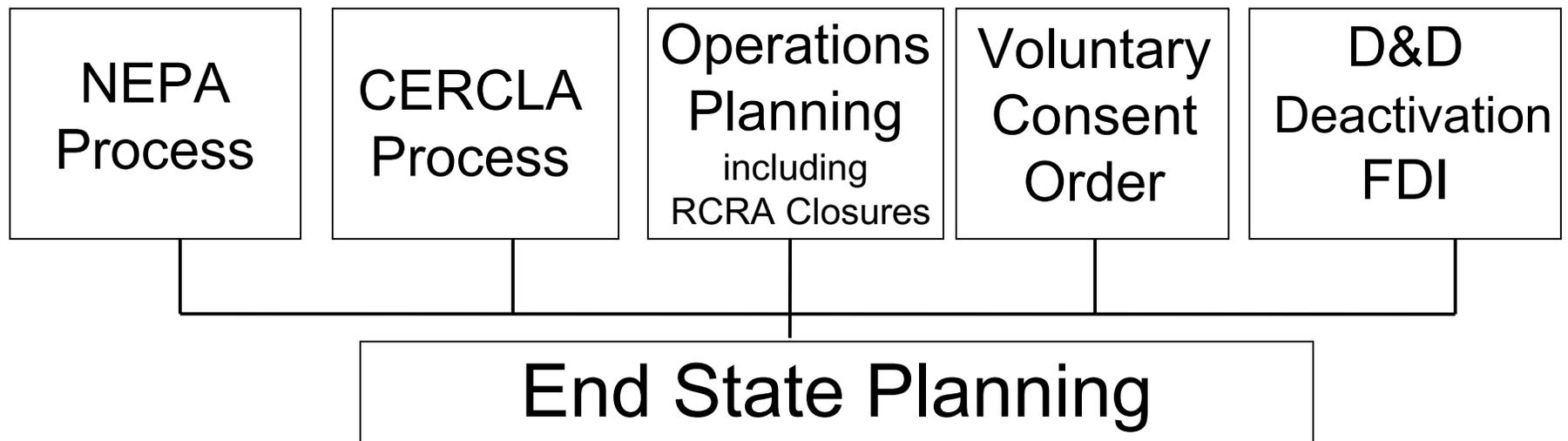


INEEL Environmental
Restoration Program

Long-Term Stewardship at the INEEL

END STATE PLANNING PROCESS DEVELOPMENT

Establish a viable, integrated planning tool





INEEL Environmental
Restoration Program

Long-Term Stewardship at the INEEL

End State Planning:

- As vision of the end state changes, so planning must change
- End State Planning must incorporate institutional controls and reflect DOE stewardship responsibilities



INEEL Environmental
Restoration Program

Long-Term Stewardship

DOE National Efforts on Stewardship:

- NRDC lawsuit over DOE Programmatic EIS
- Settlement has three elements:
 - Develop an internet-based database containing information on waste, facilities and contaminated media
 - Create a \$6.25 M fund available to non-profits for technical/scientific reviews
 - Prepare a long-term stewardship study



INEEL Environmental
Restoration Program

Long-Term Stewardship at the INEEL

PEIS Settlement Agreement- Stewardship Study:

- Stewardship Study is not an EIS but generally follows NEPA scoping process
- Focus is on national-level stewardship issues
- Will address long-term considerations, including controls and activities that would take place following final site closure



INEEL Environmental
Restoration Program

Long-Term Stewardship at the INEEL

Stewardship Plans:

- DOE expects to develop long-term stewardship plans for each major site
- Stewardship vista and development pressures vary between sites
 - Mixed use of DOE site (e.g., Oak Ridge)
 - Return to private ownership (e.g., Mound)
 - Private property remediated by DOE (e.g., Grand Junction)



INEEL Environmental
Restoration Program

Long-Term Stewardship at the INEEL

INEEL STEWARDSHIP PLAN:

- **Single Plan for INEEL in preliminary development**
- **CERCLA institutional controls developed by WAG in RD/RA documents and will be appended to the Plan**
- **Institutional controls also incorporated in the INEEL Comprehensive Facility and Land Use Plan**



INEEL Environmental
Restoration Program

Long-Term Stewardship at the INEEL

INEEL Vista:

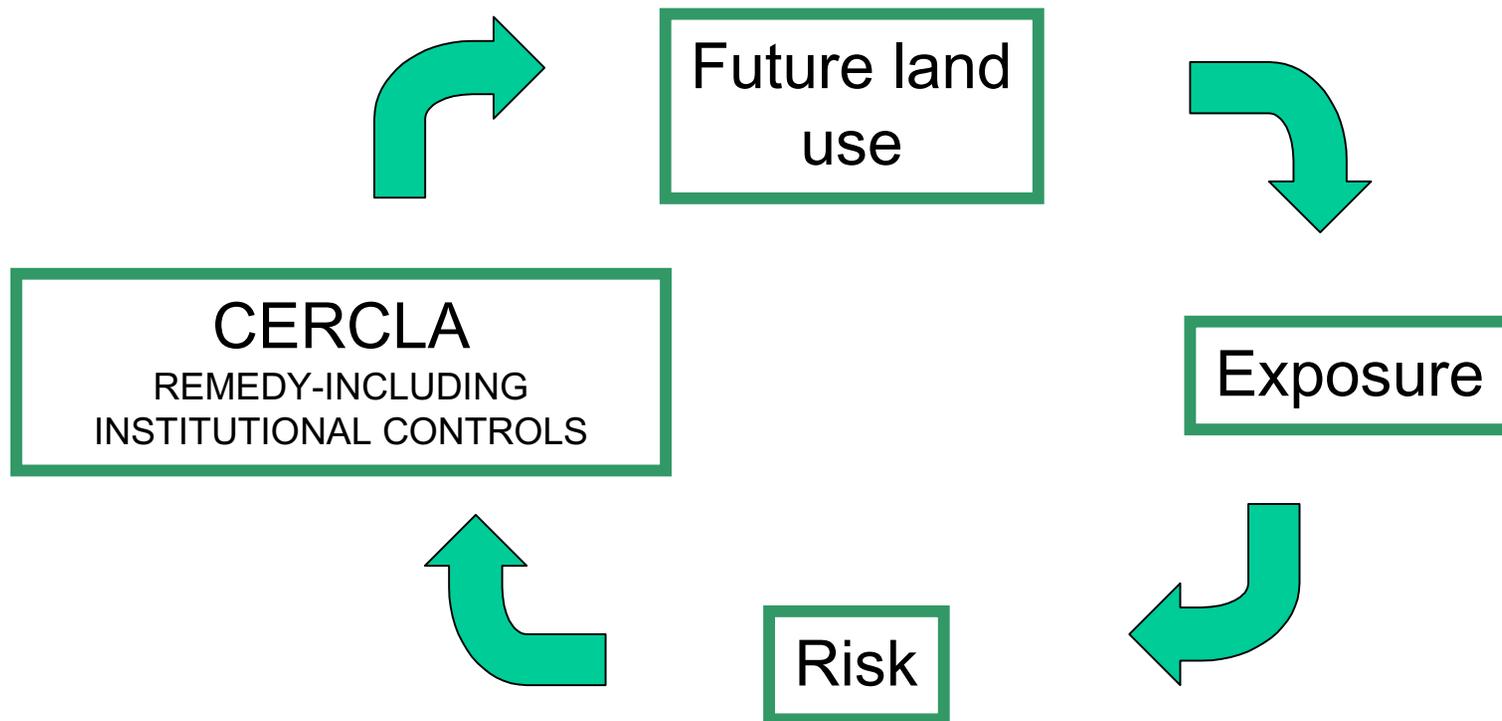
- Rocket launch facility
- Privatized waste treatment in industrial corridor
- Sagebrush steppe habitat protection
- National Environmental Research Park



INEEL Environmental
Restoration Program

Long-Term Stewardship at the INEEL

Key concept for long-term stewardship:





INEEL Environmental
Restoration Program

Long-Term Stewardship at the INEEL

CAB role in the evolution of INEEL stewardship:

- Forum for different positions
- Source of ideas
- Honest broker for conflicting uses