



U.S. DEPARTMENT OF
ENERGY

Nuclear Energy

Land Use Planning at The Idaho National Laboratory

February 12, 2014

Greg Bass
Idaho Operations Office
Infrastructure Support

General History of INL Land/Mission

- Central portion of Site initially used for Navy ordnance testing
- Total area of Site was expanded and transferred to Atomic Energy Commission (AEC) which later became DOE
 - National Reactor Testing Site (NRTS) - 1950
 - Idaho National Engineering Laboratory (INEL) - 1974
 - Idaho National Engineering & Environmental Laboratory (INEEL) - 1993
 - Idaho National Laboratory (INL) - 2005

History of INL Land Withdrawals from U.S. Dept. of Interior

- PLO 318 and 545 – Provided central area of Site for Naval Proving Ground - 1940
- PLO 691 – Naval Proving Ground area transferred to AEC for atomic energy program - 1950
- PLO 637 and 1770 - Expanded area for NRTS – 1950,1952

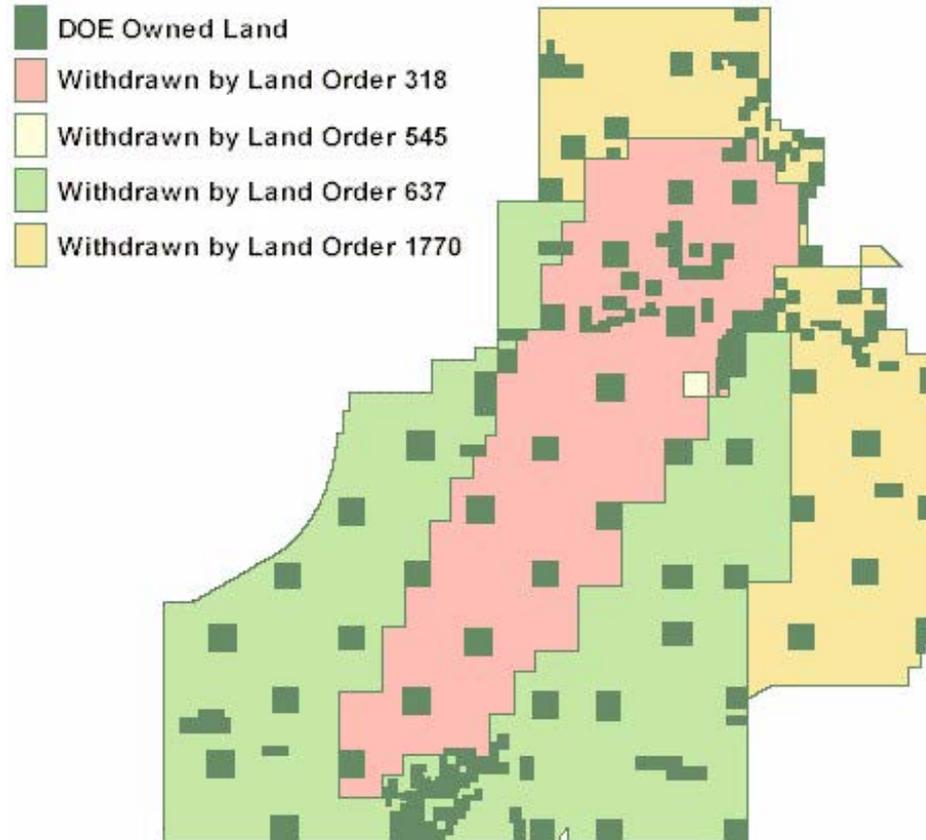


History of INL Land Withdrawals

- INL Public Land Orders do not:
 - Contain a time limitation
 - Prohibit non-conflicting secondary uses by NHS, DOD, cell phone companies, etc.



INL Land Ownership



INL Land Use Planning

- Idaho National Laboratory Comprehensive Land Use and Environmental Stewardship Report
 - Updated every 3 years or as needed to show:
 - Current conditions
 - Planning assumptions
 - Legacy site characteristics
 - WAG end states
 - Future use scenarios
- Mission - related facility needs are planned for in INL Ten Year Site Plan

Land Use Planning Assumptions

- 18 Assumptions include the following:
 - INL will achieve Nuclear Energy/National Security Missions
 - Entire INL site will remain under federal control for at least 100 years, some areas for perpetuity
 - New construction encouraged in existing facility areas/core infrastructure area (lowers utility construction costs and keeps pristine areas undisturbed)
 - Environmental remediation/D & D will be performed and completed per regulations
 - Institutional Controls/Barriers will be maintained as required.

INL Waste Area Groups

Legend

- U.S. Highways
 - State Highways
 - Rivers and Streams
 - Paved or Light-Duty Roads
 - INL Roads
 - Railroad Tracks
 - Lakes, Playas, and Spreading Areas
 - Facilities
 - INL Boundary
 - Cities
- WAG 1
 - WAG 2
 - WAG 3
 - WAG 4
 - WAG 5
 - WAG 6
 - WAG 7
 - WAG 8
 - WAG 9
 - WAG 10

Key Facilities

- CFA - Central Facilities Area
- CITRC - Critical Infrastructure Test Range Complex
- INTEC - Idaho Nuclear Technology & Engineering Center
- MFC - Materials & Fuels Complex
- NRF - Naval Reactors Facility
- RTC - Reactor Technology Complex
- RWMC - Radioactive Waste Management Complex
- SMC - Specific Manufacturing Capability
- TAN - Test Area North
- TSF - Technical Support Facility

Other Deactivated / Decommissioned Facilities

- ARA - Auxiliary Reactor Area
- ARVFS - Army Reentry Vehicle Facility Site
- BORAX - Boiling Water Reactor Experiment
- EBR-I - Experimental Breeder Reactor-1 (Historical Facility)
- IET - Initial Engine Test Facility
- WRRTF - Water Reactor Research Test Facility



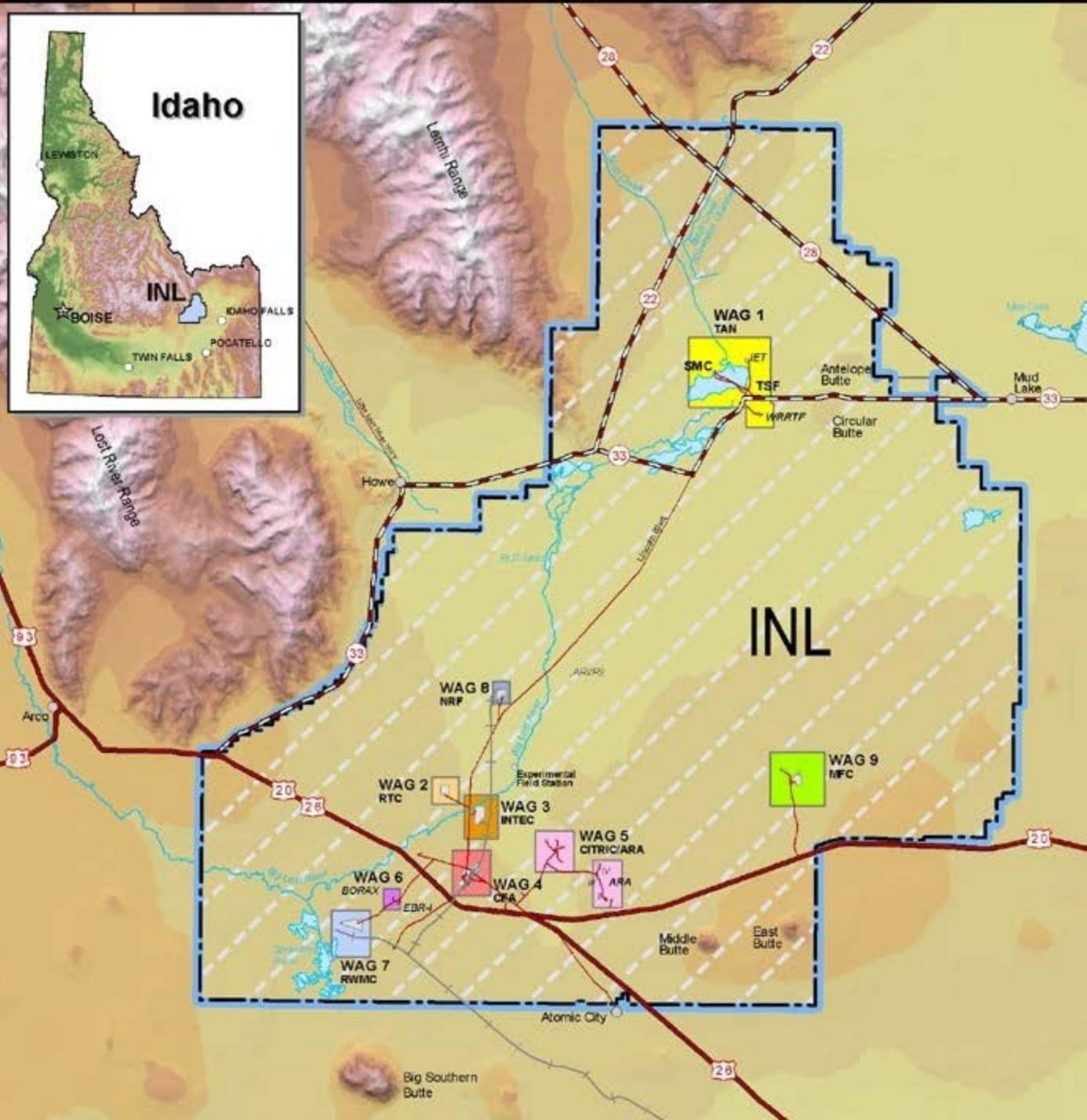
Kilometers

0 1 2 4 6 8 10 12 14 16

Miles

0 1 2 4 6 8 10 12 14

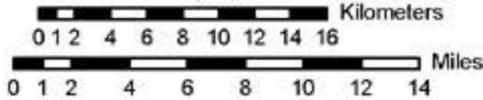
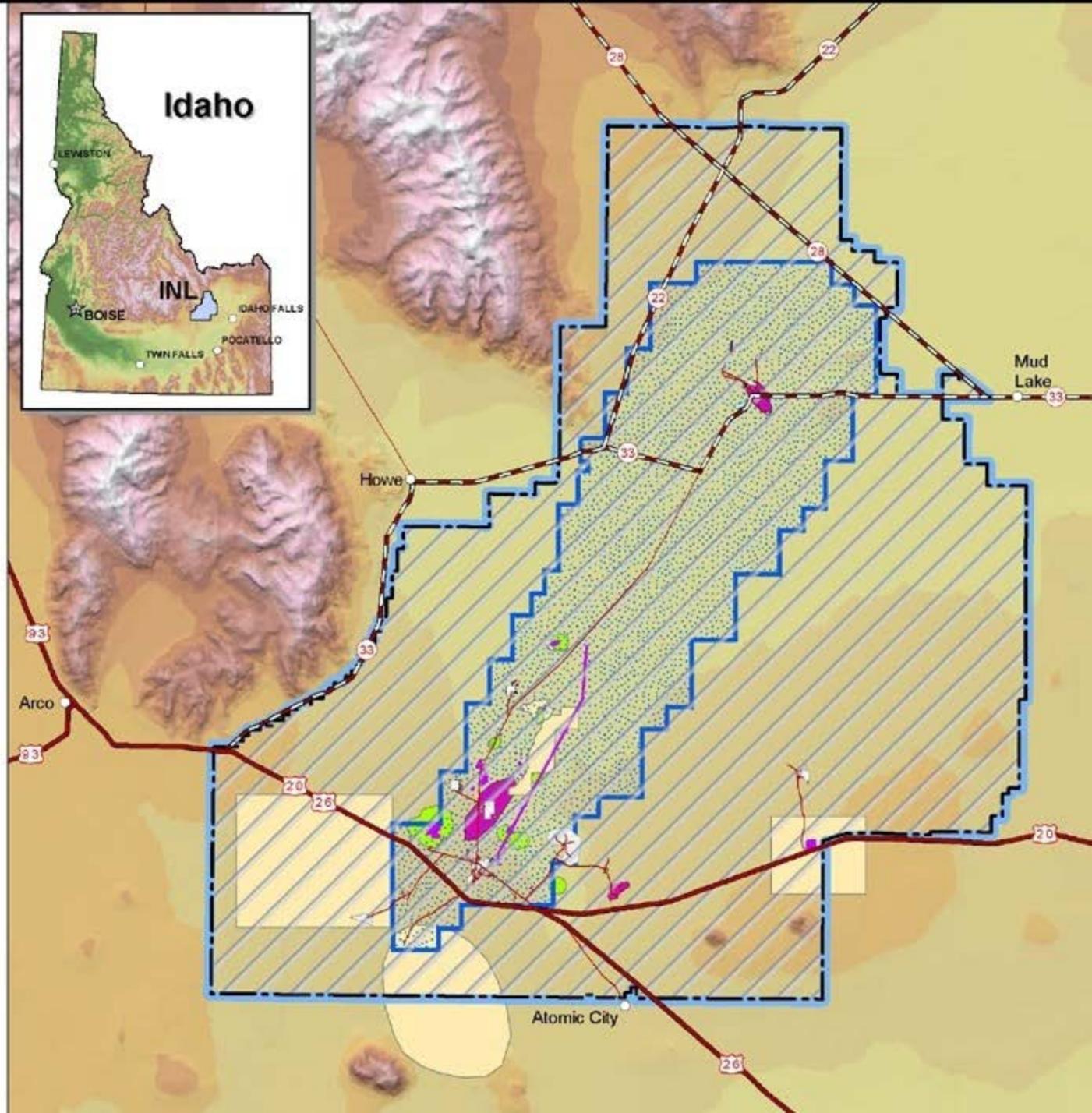
Project: 2005 Landuse Plan
 Map Requestor: Kevin Kostelnik
 GIS Analyst: Dan Mahnami
 Date Drawn: 7/28/2005
 Disclaimer: Contact the SAL at 526-3529 for information about the data shown on this map.
 Path: X:\gis_projects\2\ineel\landuse_plan_2005
 File Name: INL_MFC_Mee.at.pdf



INL Institutionally Controlled Areas

Legend

-  INL Boundary
-  Cities
-  Restricted Area
-  Action CERCLA Sites
-  No Action CERCLA Sites
-  Cleared Ordnance Area
-  Assessed Ordnance Area
-  Uncleared Ordnance Area
-  Closed Ordnance Area
-  Downrange Ordnance Area

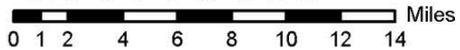
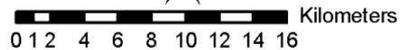


Project: 2005 Landuse Plan
 Map Requestor: Kevin Kostelnik
 GIS Analyst: Dan Mahnami
 Date Drawn: 8/4/2005
 Disclaimer: Contact the SAL at 526-3529 for information about the data shown on this map.
 Path: X:\gis_projects\2\incc\landuse_plan_2005
 File Name: 211_2005\incc\Controlled_Areas_Map.apr

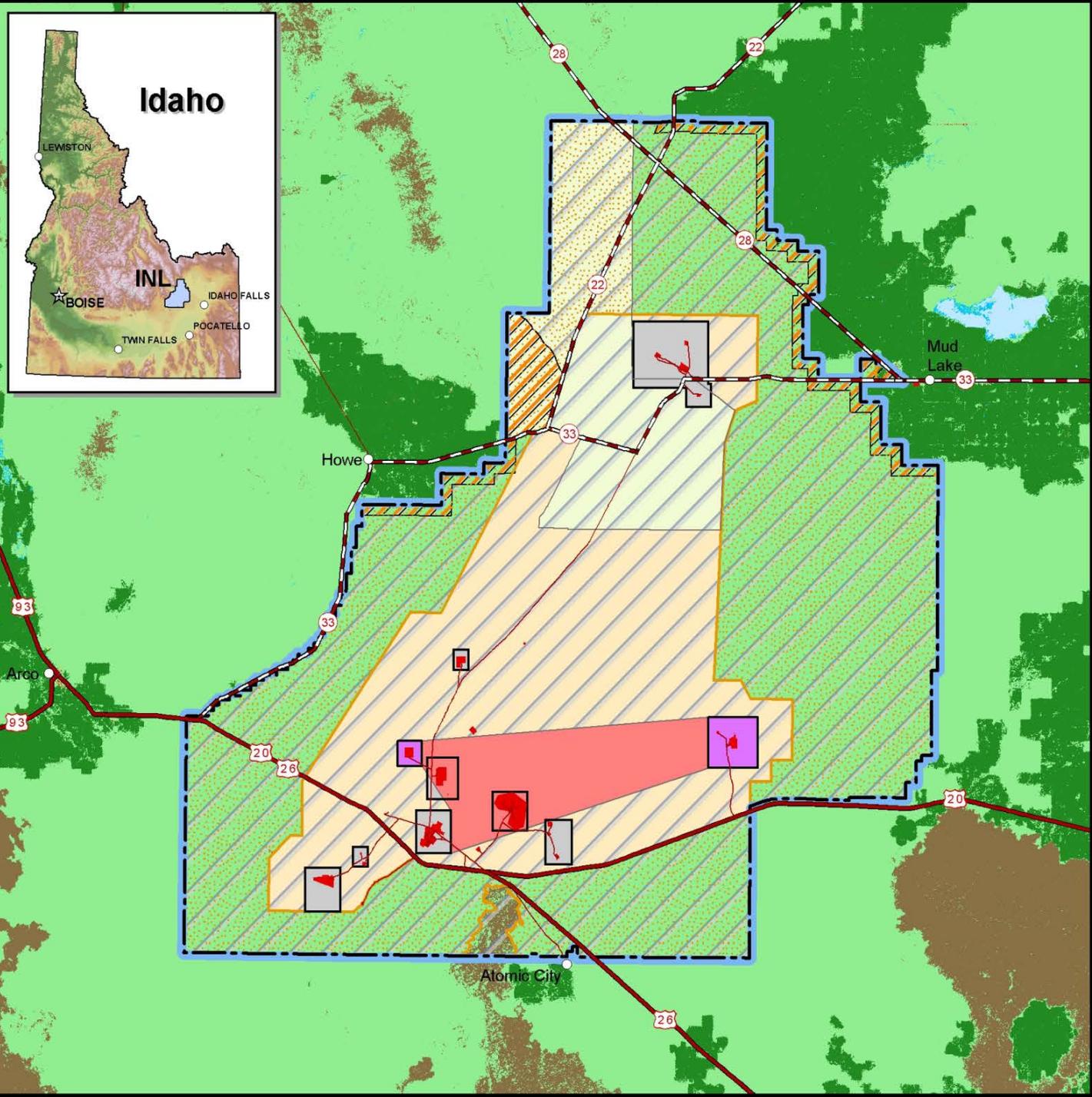
INL 10 Year Land Use Scenario

Legend

-  INL Boundary
-  Cities
-  Core Infrastructure Area
-  New Development Area
-  Possible Transportation Corridor
-  Operations/Decommissioning Area
-  Grazing Boundary
-  Sagebrush Steppe Reserve
-  INL Hunting Boundary
-  Restricted Area
- Land Use**
-  Barren
-  Industrial/Transportation
-  Non-Agricultural Vegetated
-  Wetlands
-  Agricultural
-  Residential
-  Water



Project: 2005 Landuse Plan
 Map Requestor: Kevin Kostelnik
 GIS Analyst: Dan Mahnami
 Date Drawn: 9/8/2005
 Disclaimer: Contact the SAL at 526-3529 for information
 about the data shown on this map.
 Path: X:\gis_projects2\ineel\landuse_plan_2005
 File Name: 10_Year_Land_Use_Scenario_Map-al_v1.mxd
 Control Number: SALAM001361



Non-DOE Land Use at INL Site

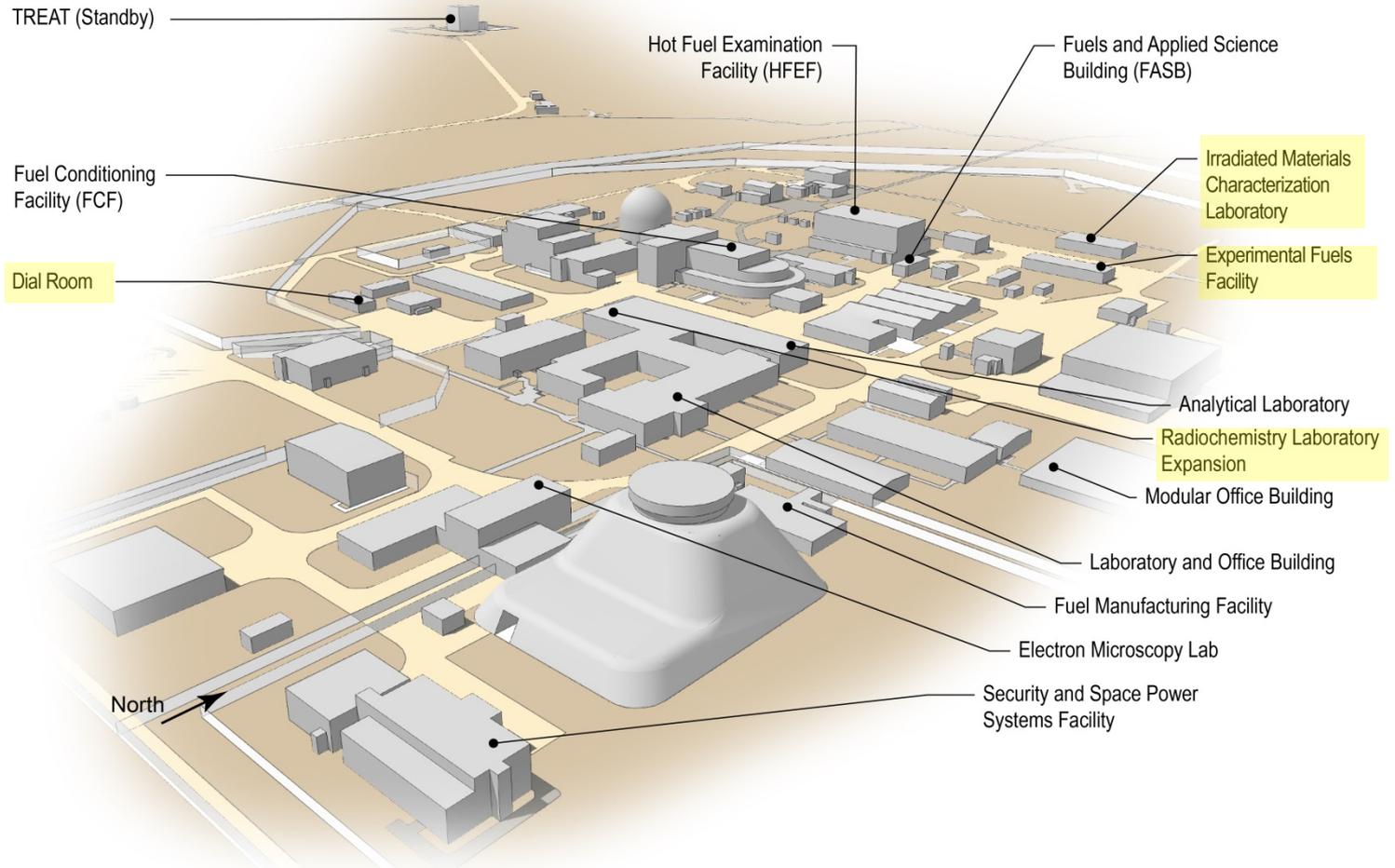
- DOE makes decisions with assistance from BLM or Idaho Fish & Game
 - Rights of way – Administered by BLM
 - Easements – Administered by BLM
 - Grazing – Managed by BLM
 - Hunting – Managed by ID Fish and Game
- DOE Land Use Committee evaluates requests
 - LUC has reps. from INL Security, Cultural Resources, Natural Resources, Infrastructure, IT/comm., Legal, Environmental Restoration, NRF, NHS, NEPA
 - Uses Imap capability to evaluate requests

Planned INL Campus Development

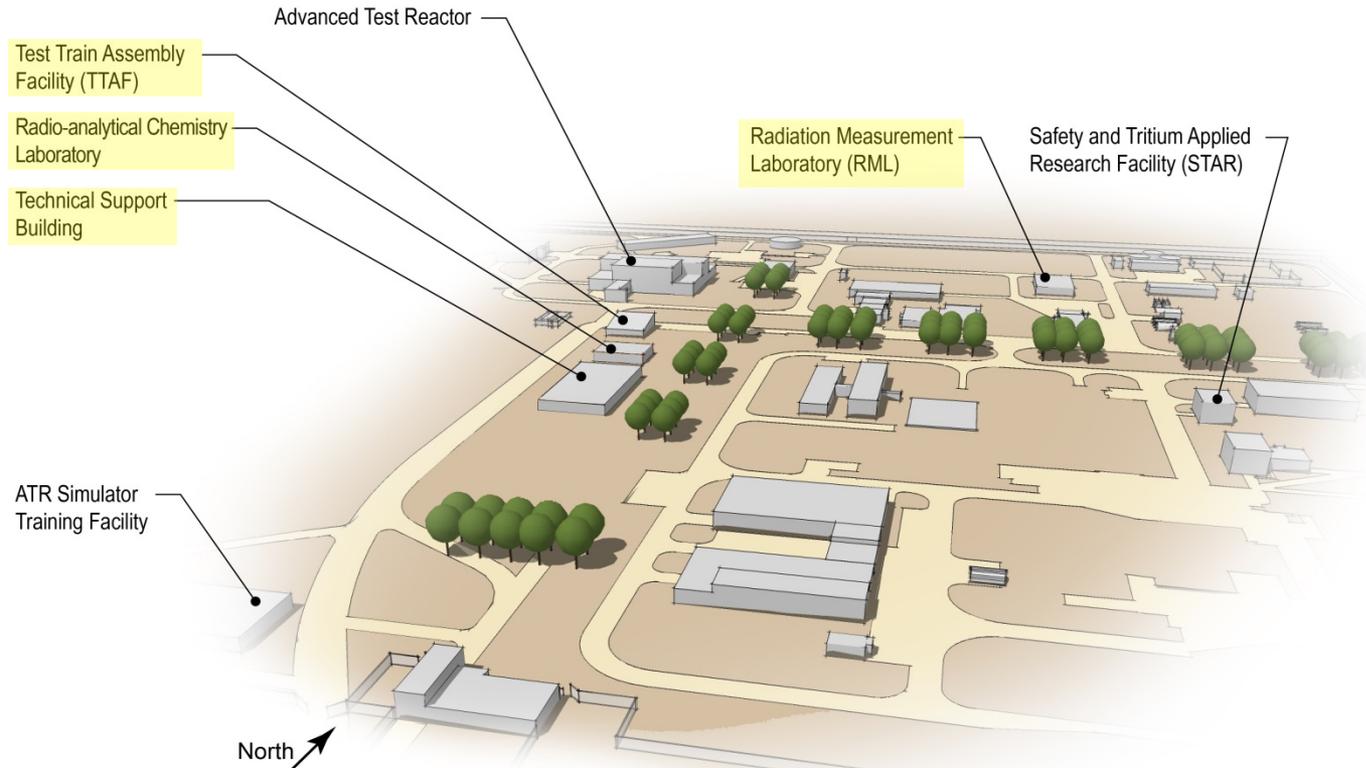
- New facilities are required for NE and National Security missions
- Consolidate scattered in-town research and development capabilities at the INL Research and Education Campus
- Focus on capabilities - streamline INL Site facilities to support program missions
- Modernize/upgrade existing facilities where feasible
- Invest in new facilities

Materials and Fuels Complex Master Plan

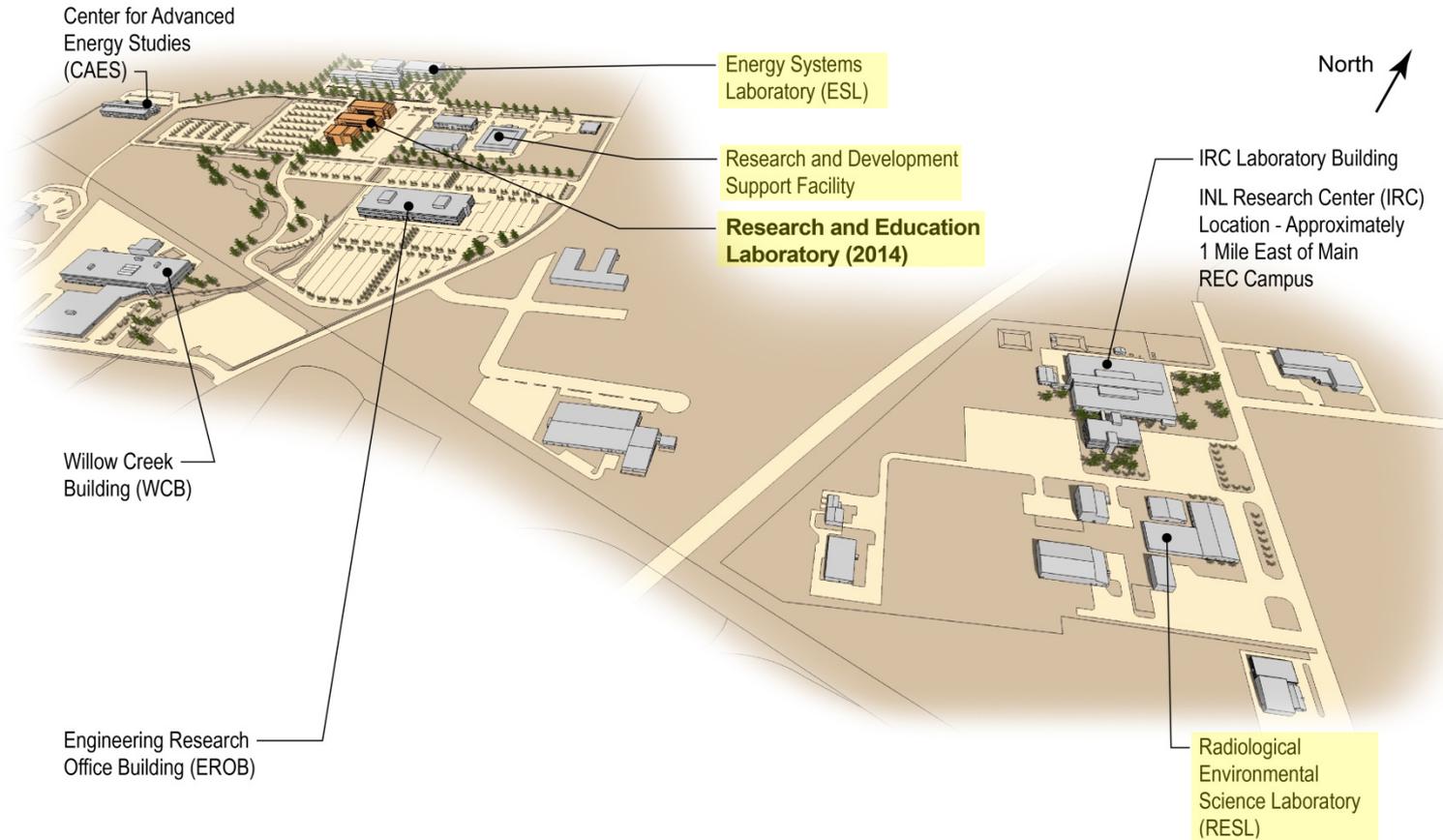
(yellow-highlighted facilities are less than 5 years old)



Advanced Test Reactor Complex Master Plan



Research and Education Campus Master Plan



Summary

- The INL Site land and facilities are expected to be under Federal institutional control for at least the next 100 years.
- The intent is to grow the INL for Nuclear Energy research and National Security missions.
- The end state of cleanup sites is considered in land use planning.
- The DOE Land Use Committee encourages locating new facilities in previously developed areas.

Dashboard Summary

Land Use Planning at the INL Site

Key Questions	Dashboard Indicator	Comments
Impact on budget for activity/cleanup		Land use planning and stewardship prevents costly interference with cleanup activities
Impact on employment/economic development		Supports expansion of nuclear energy and national security research missions at INL Site
Affect on agreements		Supports FFA/CO and Settlement Agreement goals
Impact on safety and environment		Prevents intrusion into cleanup sites, minimizes disturbance of pristine areas
Impact on cleanup DOE-wide		Promotes cost-efficient cleanup ¹⁸ and monitoring at INL Site