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Session A9: Maintaining Agency Capacity for Ongoing and Future Road-Stream Crossing Challenges

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Maintaining Capacity for ongoing and future road-stream crossing challenges.



Kurt Gernerd Assistant Director- Engineering United States Department of Agriculture, Forest Service





Forest Service Infrastructure

- The Forest Service has 270,000 miles of road.
- Road Bridges 6,206 Trail Bridges 6,785
- Approx. 300 fisheries biologists, 275 hydrologists and 1,700 engineers.
- Historically FS replaced 200-300 road-stream crossings annually.
- Federal Highways funding has provided significant funding for Aquatic Organism Passage projects.





CHALLENGES

- Extensive coordination with partners, landowners, and tribes (tribes, local, state and federal agencies, and non-government entities).
- Large transportation network that is vital to communities and the economy, and this network includes many road-stream crossings.
- De-Centralized organizations (154 National Forests, 20 National Grasslands
- Trained personnel
- Budget funding





Support for Aquatic Organism Passage Projects

- AOP at road-stream crossings projects are examples of internal integration of multiple benefits and on-the-ground, watershed restoration.
- AOP meets multiple objectives and regulatory requirements: Clean Water Act, ESA, Climate Change Resilience directives, ecological resilience to climate change for important and threatened aquatic species (fish, mussels, amphibians, crayfish, invertebrates), and flood resilience for transportation infrastructure.
- Strong external support for AOP and flood resilient stream simulation designs exists from USFWS, NOAA Fisheries, State Departments of Environmental Quality or Departments of Conservation, State and County Departments of Transportation, U.S. Army Corps of Engineers, Trout Unlimited, The Nature Conservancy and American Rivers





Guidance, Standards and Procedures

Aquatic organism passage and ecological connectivity is the goal and the first design priority, for crossing streams that provide habitat for aquatic life.

- Design Guides / Manuals
- Strategic Plan for AOP program of work
- AOP Project selection
- Communication Plan to Leadership









Program Management

- Organizational balance between in-house capabilities and external resources
- Recognize and expect annual changes in priorities and funding levels
- Continuously support training to maintain critical level of expertise
- Train –the-trainer for expanded capabilities throughout organization
- Specialized Team of experts to support field units and maintain up-to-date training courses and materials
- Indefinite Quantity Contracts in-place for units to utilize
- Leverage Funding and recognize and reward your successes





















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QUESTIONS ??



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Thanks