

Green and Sustainable Remediation

How ITRC Reduces Regulatory Barriers to
the Use of Innovative Environmental
Approaches



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ITRC Director

Our Mission and Role

Reduce
barriers

to the use of innovative
environmental
technologies

Improve the
clean up
process

by educating on
environmental
technologies and
processes

Provide a
national
consensus

on approaches to
implementing innovative
environmental technologies

ITRC Values

State Leadership

Integrity

Technical Excellence

Change

Collaboration

Innovation

Consensus

Partnership

Network



Who We Are

Members

- State government
- Federal government
- Industry
- Consultants
- Academia
- Community stakeholders
- Tribal representatives

Federal Partners



DOE



EPA



DOD

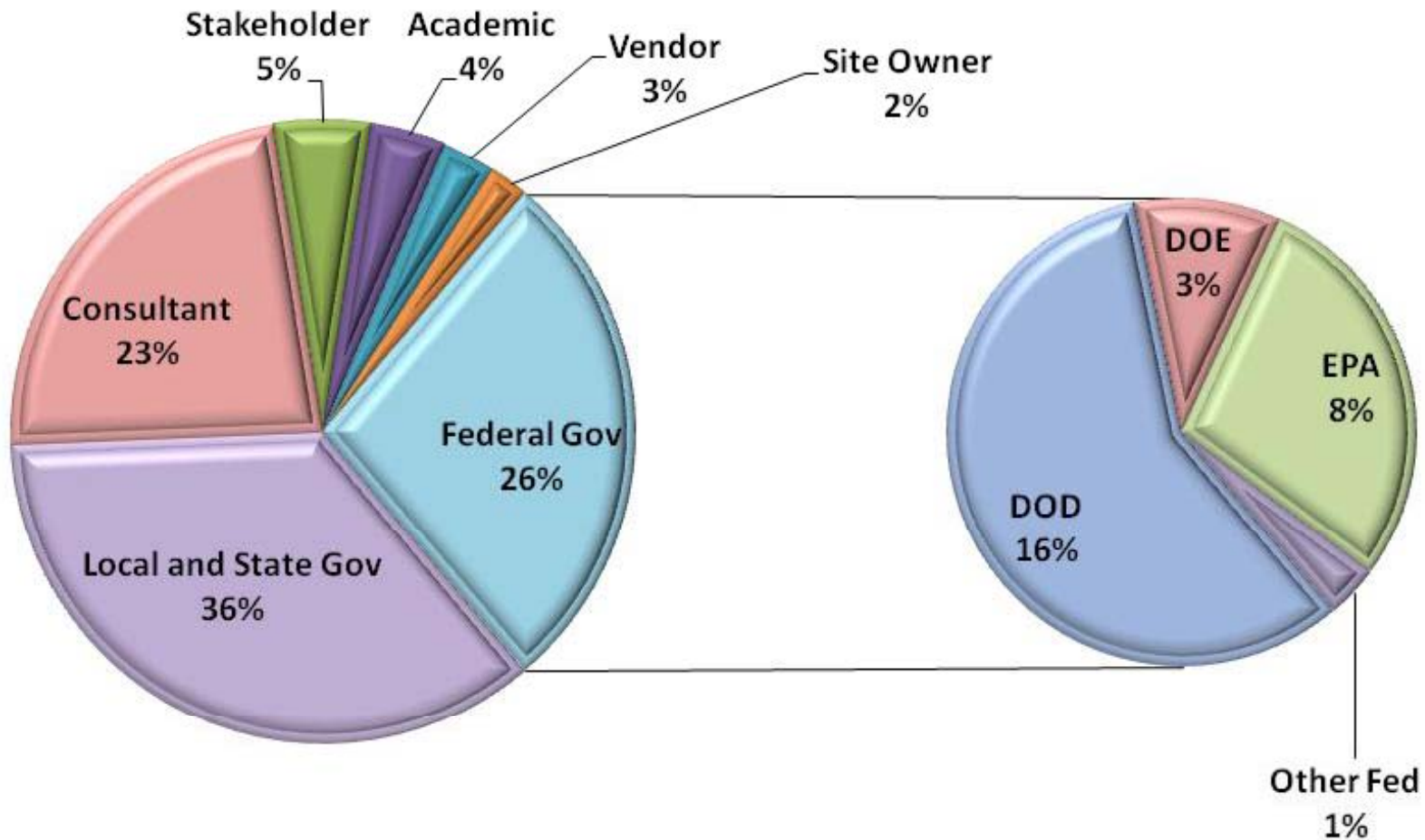
Industry Partners

56 Total



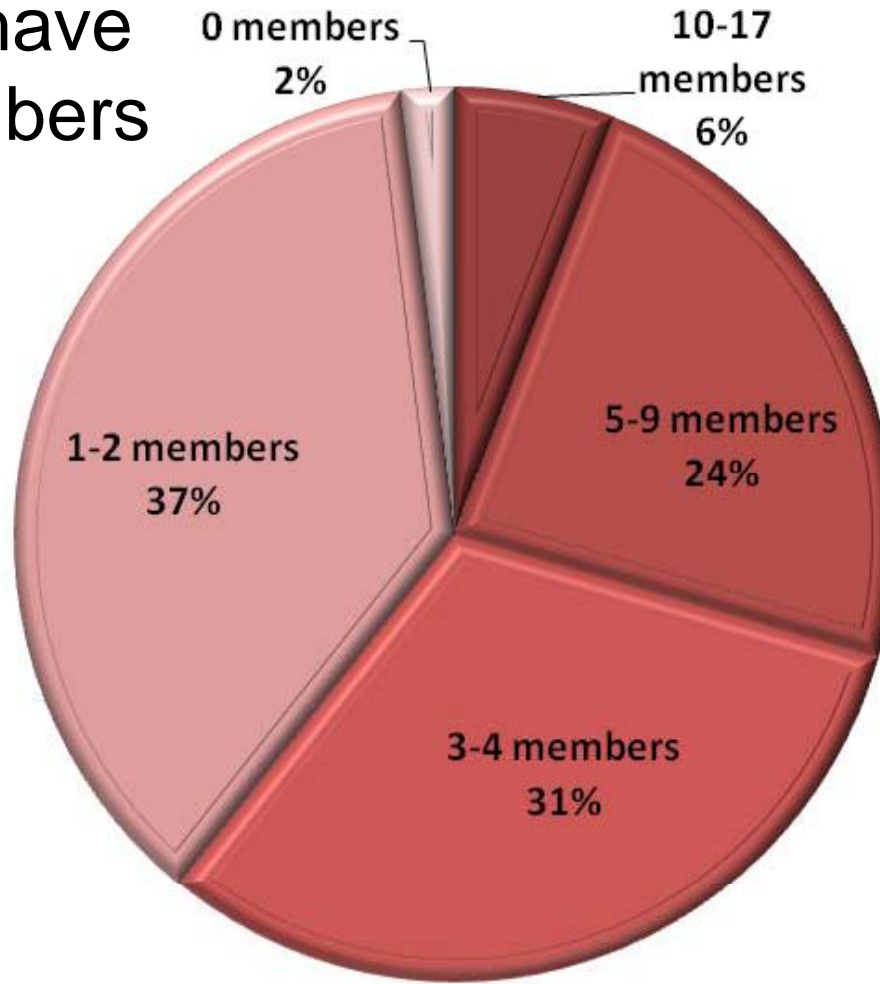
ITRC Membership Distribution

Total Membership: 535

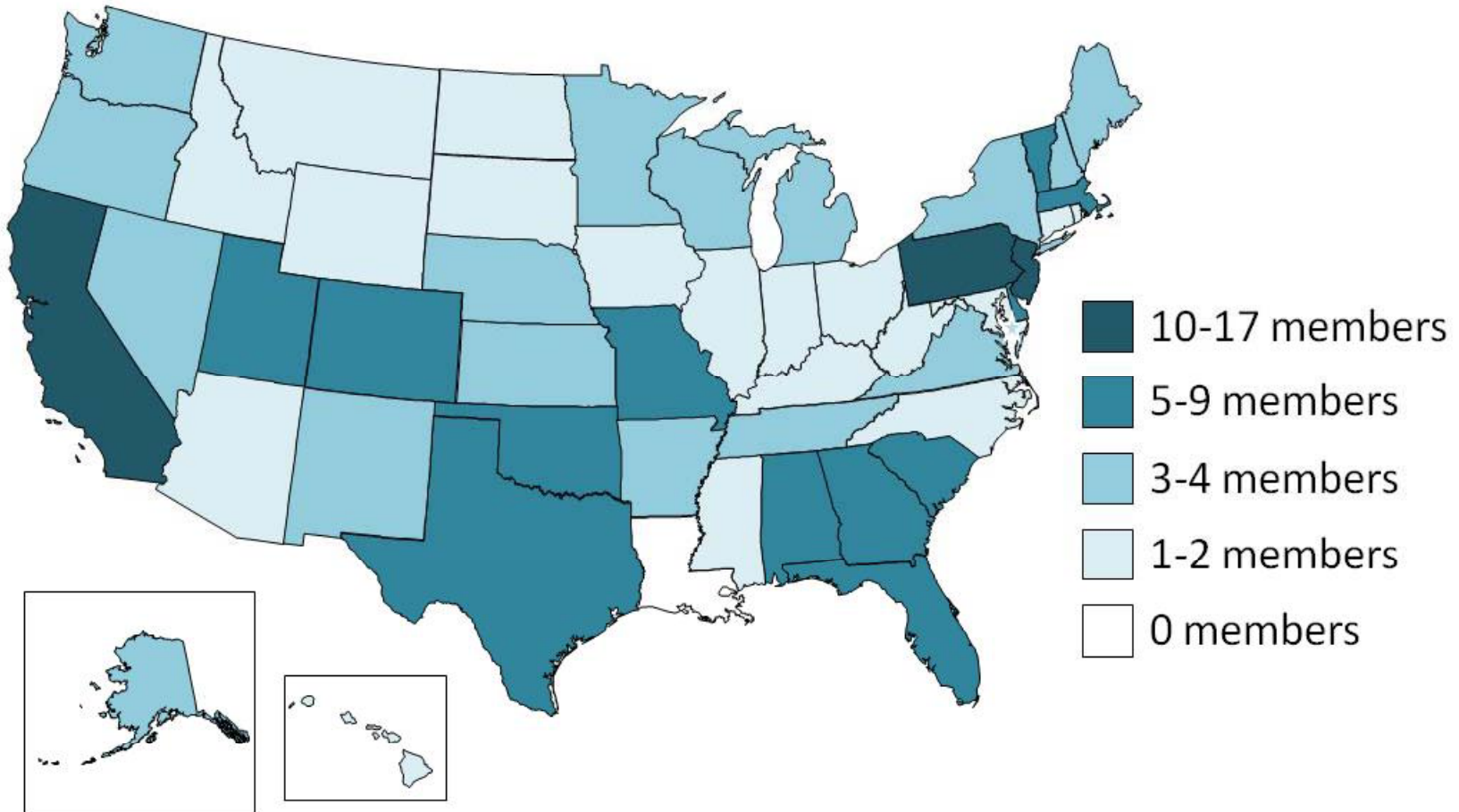


Distribution of State Members

70% of states have
2 or more members



Geographic Distribution of State Membership





How we do it

We use a proven, cost-effective approach to advance environmental solutions.



Implement Solutions



Conduct Training



Develop Products



Form Teams



Select Projects

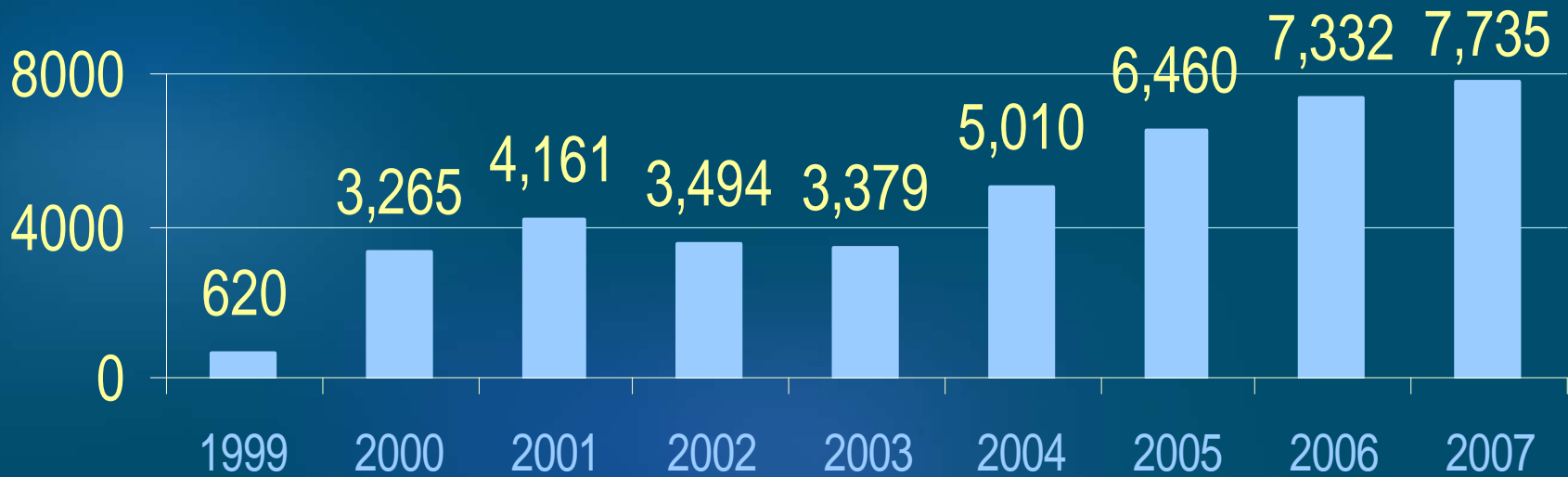
100 Documents
60 Training courses
40 Technical Teams

2009 Project Portfolio

Ongoing	Implementation	New
<ul style="list-style-type: none">• Integrated DNAPL• LNAPL• Metals & Rads• Mining Waste• Phytotechnologies• Sediments• Remediation Risk Management• UXO Wide Area Assessment	<ul style="list-style-type: none">• Bio DNAPL• EACO• Perchlorate• Rads D&D• RPO - PBM• UXO Quality Considerations	<ul style="list-style-type: none">• Green & Sustainable Remediation• Multi-Incremental Sampling• Biowall Technology• Environmental Impacts of Ethanol and Bio-Based Fuels• In Situ Stabilization and Solidification

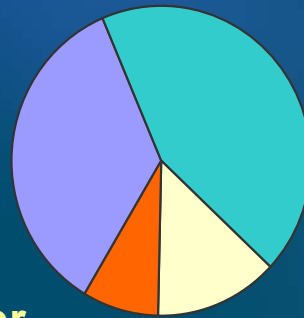
Internet Based Training

48,000 people trained thru Q3 2008



60 courses
over 10
years

State/Local
Gov't,
14,611



Consultant/
Engr Firm,
17,944

All Other,
3,313

Federal
Gov't, 5,588



Vapor Intrusion Course

SOLD OUT first offering in Portland, OR



An ITRC 2-Day Training Course

Vapor Intrusion Pathway: A Practical Guideline



October 7- 8, 2008

Red Lion Hotel – Convention Center
Portland, Oregon

Hosted by

ITRC State Member

*Oregon Department of
Environmental Quality*



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2008 State Engagement

- 44 states have committed POCs in 2008
- 33 POCs submitted State Action Plans (SAP) for coordinating activities
- Provided state environmental priorities and input on 2009 proposals
- Responded to 5 state surveys
- Review of 6 documents
- Participated in 9 training dry runs



Why Green and Sustainable Remediation?

- No nation-wide guidance on how to best incorporate green and sustainable remediation into a regulated cleanup process.
- No consistency on how to use and interpret sustainability metrics and/or life cycle analysis.
- Need a way to communicate best practices to state regulators and environmental consultants



ITRC's Green and Sustainable Remediation (GSR) Team

Goal:

Provide documents and training that educate state regulators and other environmental professionals on how to appropriately incorporate sustainability and green technologies into the cleanup process.



ITRC's Green and Sustainable Remediation (GSR) Team

- What metrics are most useful and have the greatest impact?
- What is a consistent and appropriate way of interpreting the metrics?
- How can we minimize the overall risk to human health and the environment by applying sound GSR practices?
- How can we reduce energy consumption or use alternative sources of energy that will be less harmful to overall environment?
- How do we promote the use and development of GSR technologies?



GSR Team Selection

GSR Team proposal was ranked **1 of 9** team proposals by the ITRC Board of Advisors and liaisons (weighted average with state input weighted higher)

Membership Group	Rank Out Of 9
Combined EPA ranking	5
Combined DOD ranking	3
Combined DOE ranking	3
Combined State ranking	2
ASTSWMO ranking	2
Citizen stakeholders	1
Combined industry ranking	4

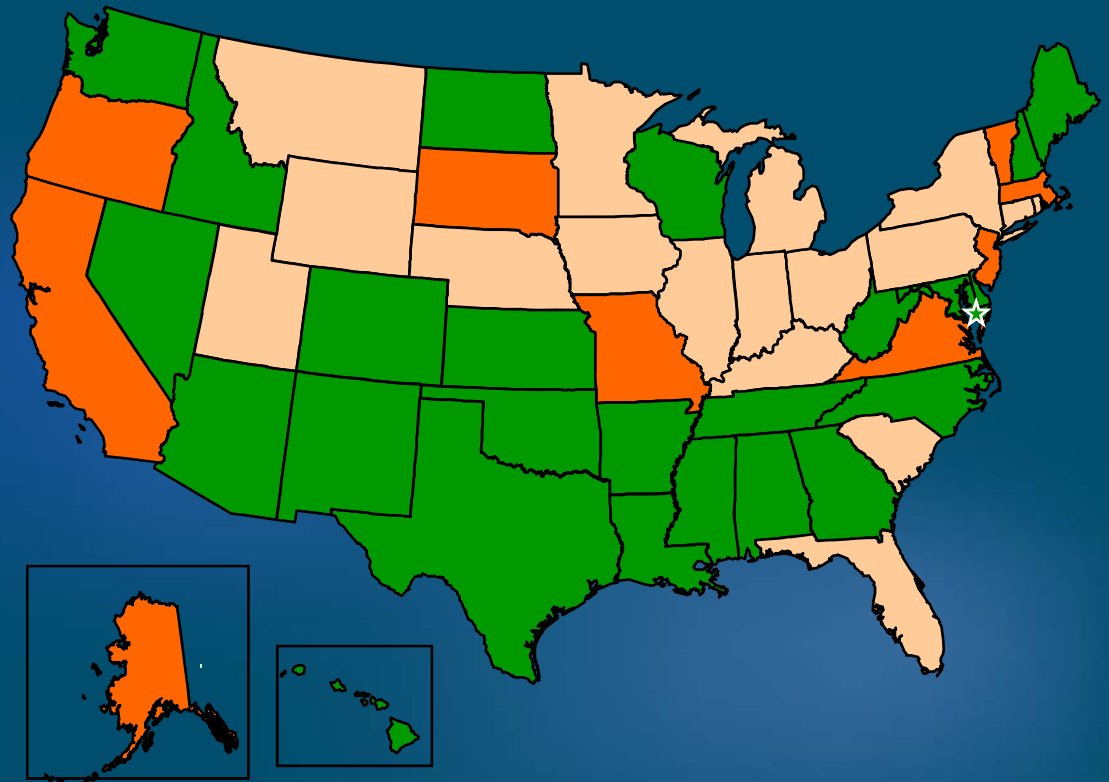


GSR Team Leadership and Composition

- Tom O'Neill – NJ Department of Environmental Protection
- 26 states have committed a team member (as of Aug 2008) or resources for product review and implementation
- Team membership commitments from major industry organizations, DOD, DOE, EPA, and citizen stakeholders

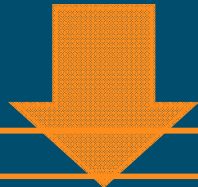
State Participation

- Committed a team member (as of Aug 2008): **AK, CA, MA, MO, NJ, OR, SD, VT, VA** (9)
- Committed resources for product review and implementation: **CT, FL, IL, IN, IA, KY, MI, MN, MT, NE, NY, OH, PA, RI, SC, UT, WY** (17)



Schedule

State Survey
Overview
Document



Technical
Regulatory
Guidance



Training
Modules

Year 1

Year 2

Year 3



Since 1995, we've been helping expedite quality regulatory decision-making, while protecting human health and the environmental.