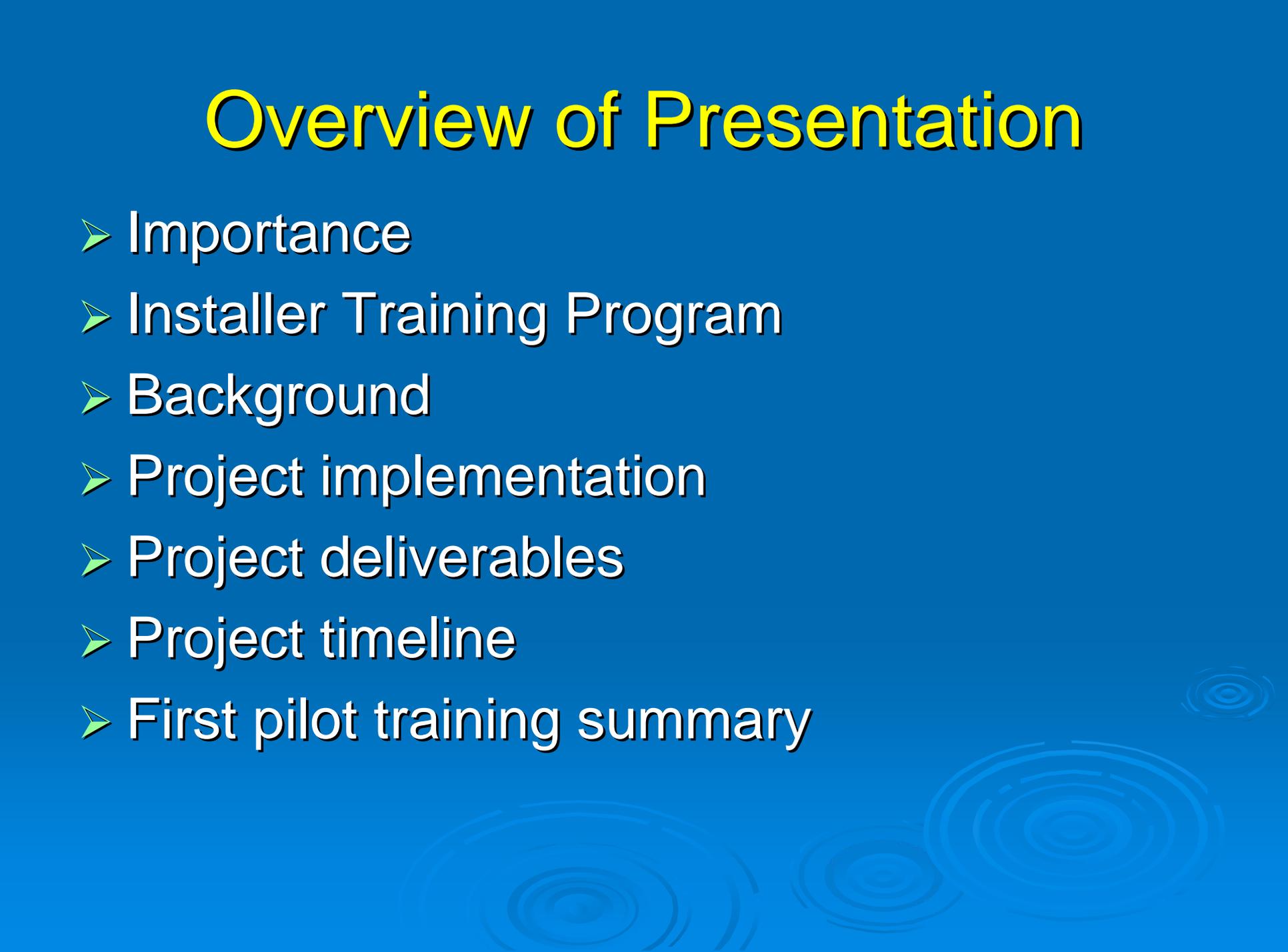


Installer Training Program



Overview of Presentation

- Importance
 - Installer Training Program
 - Background
 - Project implementation
 - Project deliverables
 - Project timeline
 - First pilot training summary
- 

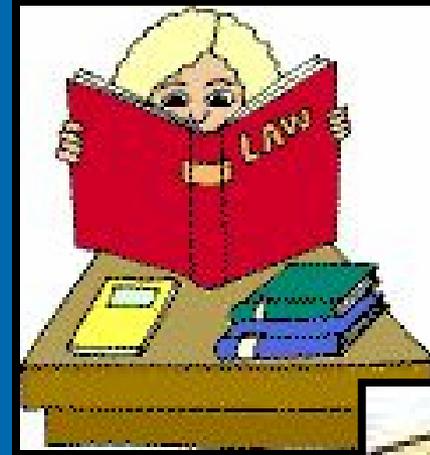
Why is an Installer program important?



- **Critical nature of system installation**
- **Standardization of installation practices**

What is an Installer?

- Professional providing a service to the public
- Basic requirements for the profession
 - Body of knowledge
 - Standards for admission
 - Standards of practice
 - Standards for retention
 - Criteria for expulsion

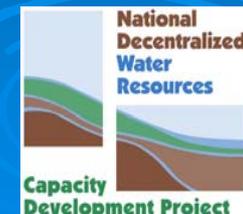


Project Background

- NOWRA 2004 – Conference short course
 - NOWRA
 - CIDWT
 - NEHA
 - Presentations describing how partners would work together to implement installer training
- NOWRA – Installer Academy, December 2005, 2006
- NEHA – CIOWTS – Implemented June 2006
- CIDWT – Proposal to WERF May 2006

Project Implementation and Development

- CIDWT – Texas Cooperative Extension
- MOU Partners: NOWRA, NEHA
- Funding:
 - EPA/NDWRCDP: WERF
- Project Review Group (PRG)
 - Stonebridge, Converse, Stuth, Smithson, Lesikar



Development and refinement of materials

➤ Writing team:

- Request for Proposals – December 2006
- Primary writers:
 - University of Minnesota, Sara Christopherson, David Gustafson
 - University of Rhode Island, George Loomis, David Kalen
 - North Carolina State University, David Lindbo, Nancy Deal
 - Texas AgriLife Extension Service, Bruce Lesikar, Rebecca Melton
- Secondary writers:
 - University of Arizona, Kitt Farrell-Poe
 - University of Tennessee, John Buchanan
 - University of Missouri, Randy Miles

Development and refinement of materials

- Review team: OIPRC Official Installation Practitioner Review Committee
 - Nine people - Highly experienced O&M service providers – Select: Writing team, PRG
- National review
 - May to July 2008
 - Request materials – CIDWT web site, www.onsiteconsortium.org

National Practitioner Training Curriculum for Onsite Wastewater Treatment System Installation

➤ Training Manual

- Description of critical skills, knowledge and abilities
- Checklists of critical components of the installation process

➤ Training materials to conduct two-day course

Project Deliverables

- Training Manual: bound copy – cost recovery basis
- Presentation materials: Train-the-Trainer program
- Four pilot testing events: NOWRA(2), VOWRA, MSF, KSF, IOWA, and Nebraska
- Two OIPRC meeting
- Web assisted sharing of project information
- Final Report

Project Timeline

- PRG – December 2006
- RFP – December 2006, February 2007
- Writing Team – May 2007
- OIPRC – August 2007, March 2008
- First Meeting – August 2007
- Pilot Testing – December 2007, March 2008, December 2008, March 2009
- Broad Review: April – July 2008
- Final Materials: June 2009

Pilot Training Evaluation

- December 10-11, 2007 NOWRA Installer Academy, Las Vegas
- 40 - 60 Participants
- Retrospective Pre- then-Post Evaluation

Retrospective Pre-Then-Post Evaluation

Question	Mean
Effectively evaluate the site conditions and system installation when developing a contract:	26.3
Review a design plan and conduct a site review to successfully develop a bid and plan for construction:	23.2
Evaluate site conditions with respect to OSHA construction safety practices:	34.3

Retrospective Pre-Then-Post Evaluation

Question	Mean
Use of surveying practices to lay out the system, locate components and evaluate proper elevations:	25.3
Recognize how site conditions influence equipment selection and installation methods:	15.0
Understand how effective excavation, bedding, placement and backfilling methods help achieve stable watertight components:	26.2

Retrospective Pre-Then-Post Evaluation

Question	Mean
Select and assemble pumping systems and properly adjust and verify control settings.	18.6
Implementation of critical practices needed for installation of advanced treatment system components.	30.3
Install soil treatment areas at the proper elevation using appropriate materials while maintaining natural soil conditions.	17.6

Retrospective Pre-Then-Post Evaluation

Question	Mean
Understand how proper installation influences subsequent operation and maintenance activities and facilitates management of wastewater treatment systems.	21.3

Willingness to adopt

Question	Not	?	May be	Yes Now	Not Again
Utilize a checklist to document completeness of installation process.	0	7	17	7	0
Utilize a checklist to document startup status of treatment system.	1	6	18	6	0
Implement safety practices to minimize potential of work-place accidents.	0	1	12	17	0

Willingness to adopt

Question	Not	?	May be	Yes Now	Not Again
Provide system owner's information on proper system management .	0	2	11	17	0
Implement watertightness testing procedures for evaluating tanks.	2	3	15	10	0

Using the Materials

- Training Manual – Purchase bound manual at cost recovery basis – July 2009
- Potential Instructors:
 - CIDWT member
 - Attend CIDWT Installer Train-the-Trainer program - July 2009?
 - Instructors guide
 - Provided the latest version of Presentations with speaker notes

Summary

- Importance
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- 