



Indian Health Service (IHS)
Office of Environmental Health and Engineering (OEH&E)
Division of Sanitation Facilities Construction (DSFC)



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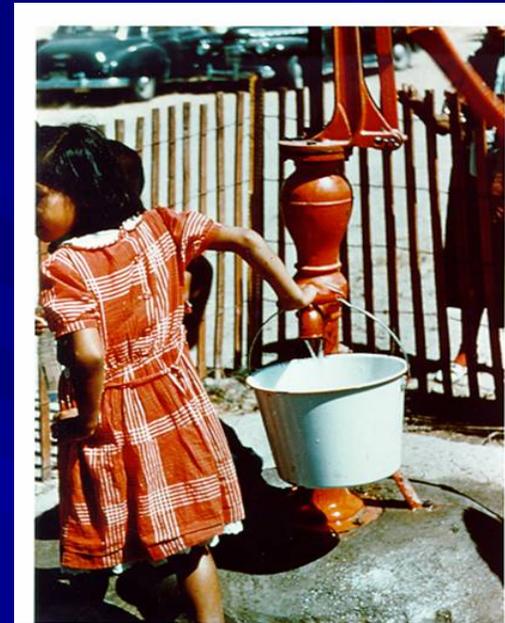
Topics

SFC

- Who?
- What?
- How?
- Accomplishments
- Challenges

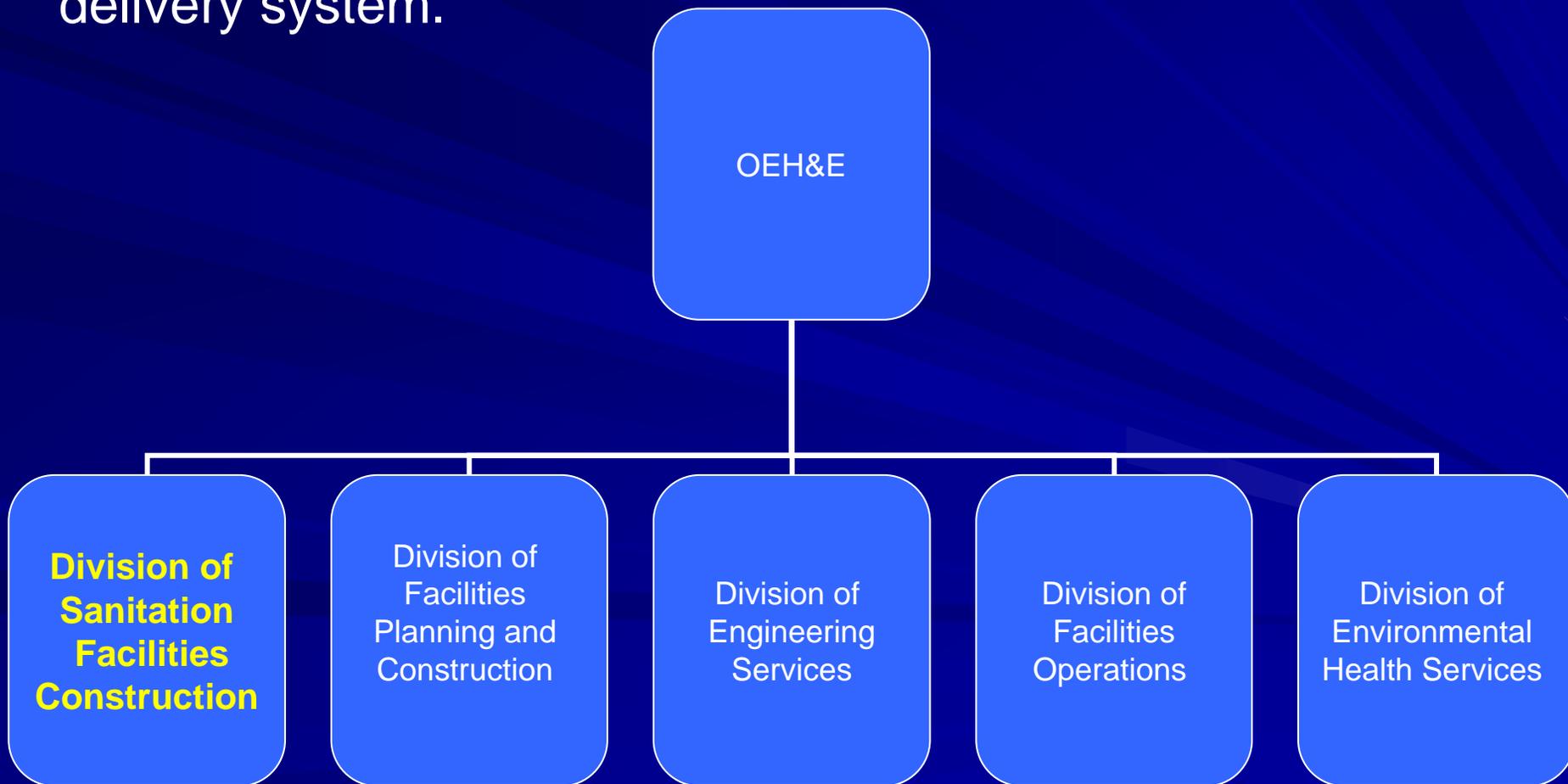
Data Systems

- What we have - wSTARS
- OEH&E Integrated Concept



Who?

The Sanitation Facilities Construction (SFC) Program is the environmental engineering component of the IHS health care delivery system.



What?

Support the IHS Mission P.L. 86-121

The mission of the Indian Health Service (IHS) is to raise the health status of the American Indian and Alaska Native people to the highest possible level. To carry out this mission, the IHS provides comprehensive primary health care and disease prevention services.

The SFC Program provides technical and financial assistance to American Indian tribes and Alaska Native villages for cooperative development and continued operation of safe water, wastewater, and solid waste systems and related support facilities.



How?

- Approx SFC Budget – \$92 million
- Outside contributions are often 2-3 times our budget
- Network of 12 IHS Area Offices, Districts and Field Offices working with tribes, other Federal agencies and communities at the local level



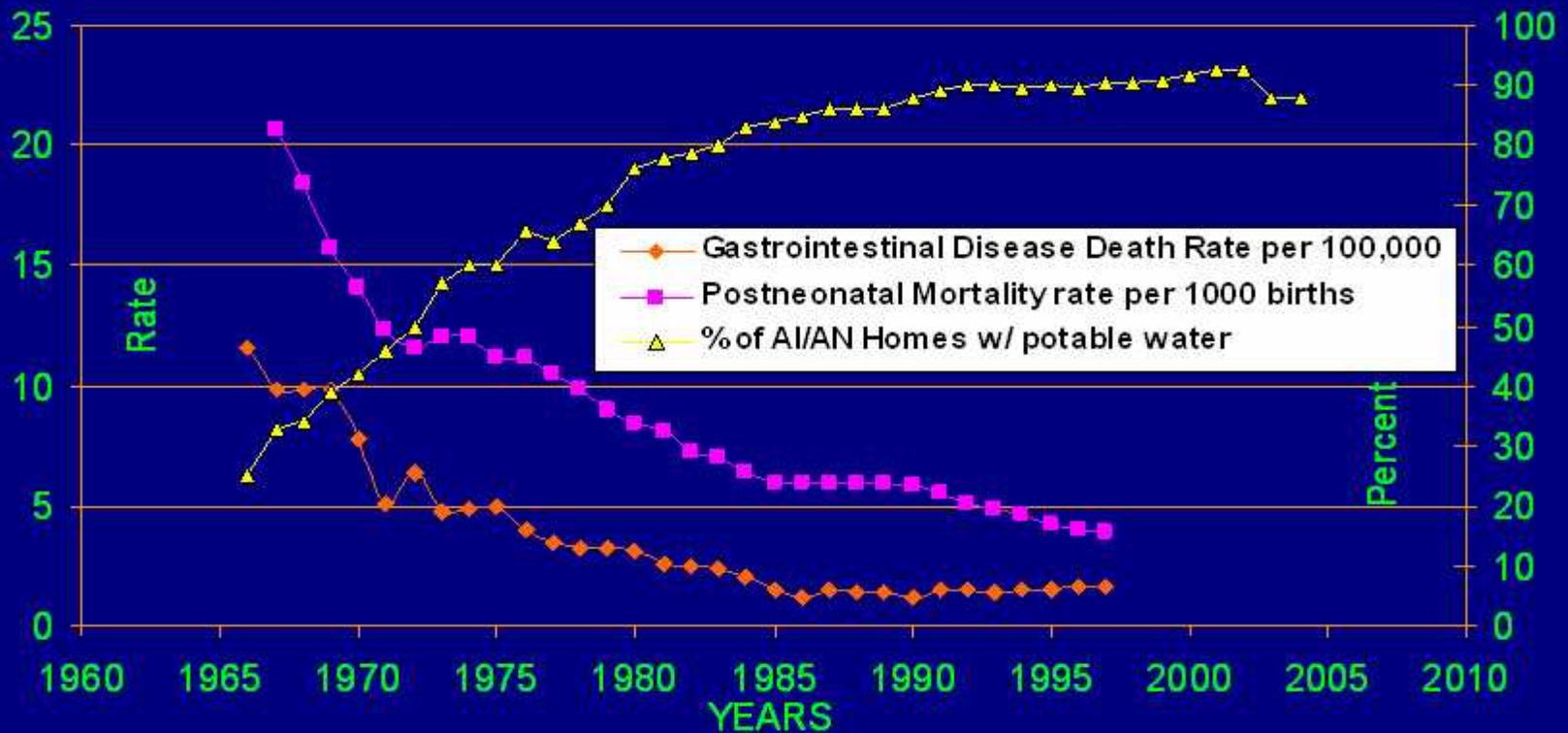
SFC Accomplishments

- Since 1959, over 265,000 homes have been provided sanitation facilities.
- The gastroenteric and post-neonatal deaths have been significantly reduced.



SFC Accomplishments

Gastrointestinal Disease and Postneonatal Mortality Rates Compared with the Percent of American Indian and Alaskan Native Homes with Potable Water



SFC Challenges

~38,000 homes without potable water

\$2 billion worth of existing sanitation deficiencies



SFC Challenges

Difficult construction sites



SFC Challenges

- Increased workload
- Staff
- New laws/regulations
- Decentralized offices



Addressing Challenges

How do we address some of these challenges?

We use **DATA SYSTEMS** to help.....

- Justify/Report funding needs
- Leverage contributions from outside sources
- Manage projects
- Answer frequent questions from Tribes, OMB, Dept, etc
- Standardize Processes
- Our data is trusted by others
- Some required by law



wSTARS Sanitation Tracking & Reporting System

<https://wstars.ihs.gov> (production)

<https://wstarstest.ihs.gov> (development)

wSTARS - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media

Address <https://wstars.ihs.gov> Go

INDIAN HEALTH SERVICES
1849

Web-Based Sanitation Tracking and Reporting System (WSTARS)

Welcome to WSTARS, a database containing sanitation data that is utilized for submitting rural community projects for funding approval by IHS headquarters.

National Home

Welcome to the Sanitation Tracking and Reporting System [Contact Us](#)

Overview of the Web Sanitation Tracking and Reporting System (wSTARS)

The Web Sanitation Tracking and Reporting System (wSTARS) is an inventory of the sanitation deficiencies of American Indian (AI) and Alaska Native (AN) communities, which consist of needed water, sewer and solid waste facilities for existing homes. The sanitation deficiencies data are identified by each of the 12 Indian Health Service Area Offices across the nation in consultation with the respective Tribes in those Areas. The sanitation deficiency data is updated annually and reported to Congress as required by the Indian Health Care Improvement Act, Public Law 94-437, as amended (25 U.S.C. 1601 et seq).

SDS guidelines have been established and are required to ensure uniform Area standards and procedures for identifying deficiencies, and in planning and prioritizing projects. All tribes, regardless of Sanitation Facilities Construction (SFC) Program delivery method, report their SDS needs similarly and participate equally in the allocation process, in accordance with Sections 302(g)(2) and 302(g)(3) of P.L. 94-437, as amended. Each Area Office SDS project request must be submitted to the IHS Headquarters SFC Program by August 1 of each year. The SDS project information will be used to update the SDS priority list of projects that IHS submits to Congress.

SELECT AN AREA

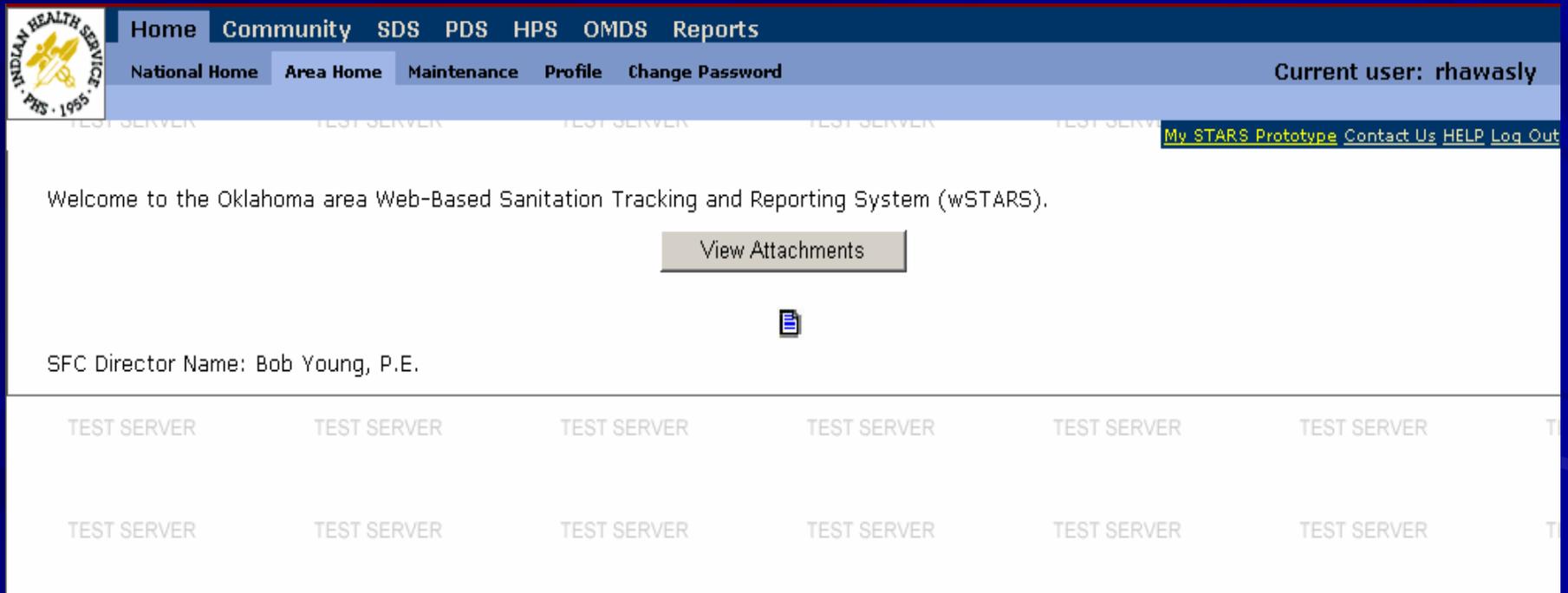
Click an area on the map or the list below.

▶ IHS Headquarters	▶ Nashville Area
▶ Aberdeen Area	▶ Navajo Area
▶ Alaska Area	▶ Oklahoma Area
▶ Albuquerque Area	▶ Phoenix Area
▶ Bemidji Area	▶ Portland Area
▶ Billings Area	▶ Tucson Area
▶ California Area	

VeriSign Secured
VERIFY

wSTARS Sanitation Tracking & Reporting System

- Web based since 2001
- ~250 active users



The screenshot displays the wSTARS web application interface. At the top left is the logo for the Indian Health Service, featuring a caduceus and the text "INDIAN HEALTH SERVICE" and "1955". The main navigation bar includes links for Home, Community, SDS, PDS, HPS, OMDS, and Reports. A secondary navigation bar contains links for National Home, Area Home, Maintenance, Profile, and Change Password. The current user is identified as "rhawasly". On the right side, there are links for My STARS Prototype, Contact Us, HELP, and Log Out. The main content area contains a welcome message: "Welcome to the Oklahoma area Web-Based Sanitation Tracking and Reporting System (wSTARS)." Below this message is a "View Attachments" button and a small document icon. At the bottom of the page, there is a row of "TEST SERVER" labels.

Home Community SDS PDS HPS OMDS Reports

National Home Area Home Maintenance Profile Change Password

Current user: rhawasly

My STARS Prototype Contact Us HELP Log Out

Welcome to the Oklahoma area Web-Based Sanitation Tracking and Reporting System (wSTARS).

View Attachments

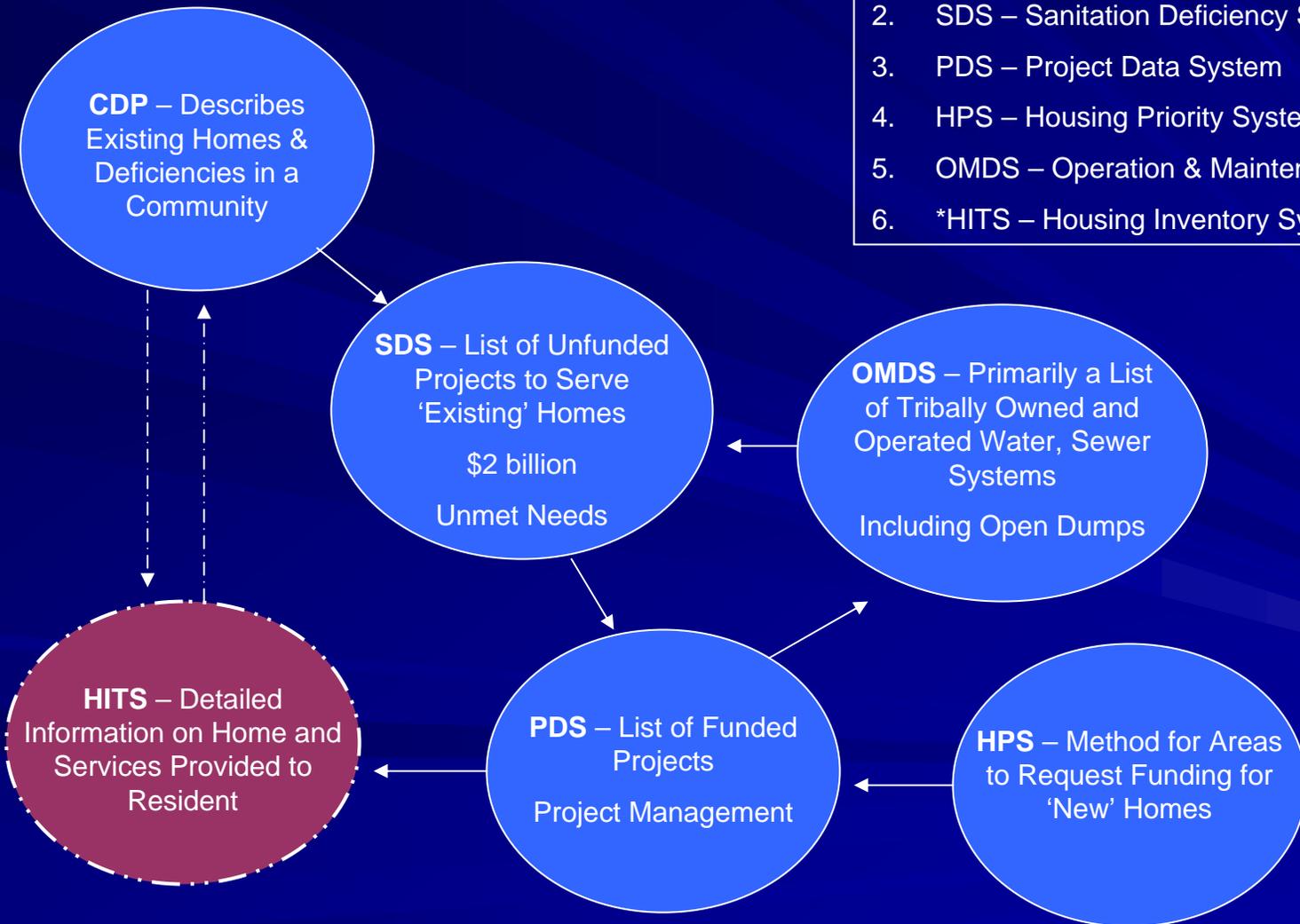
SFC Director Name: Bob Young, P.E.

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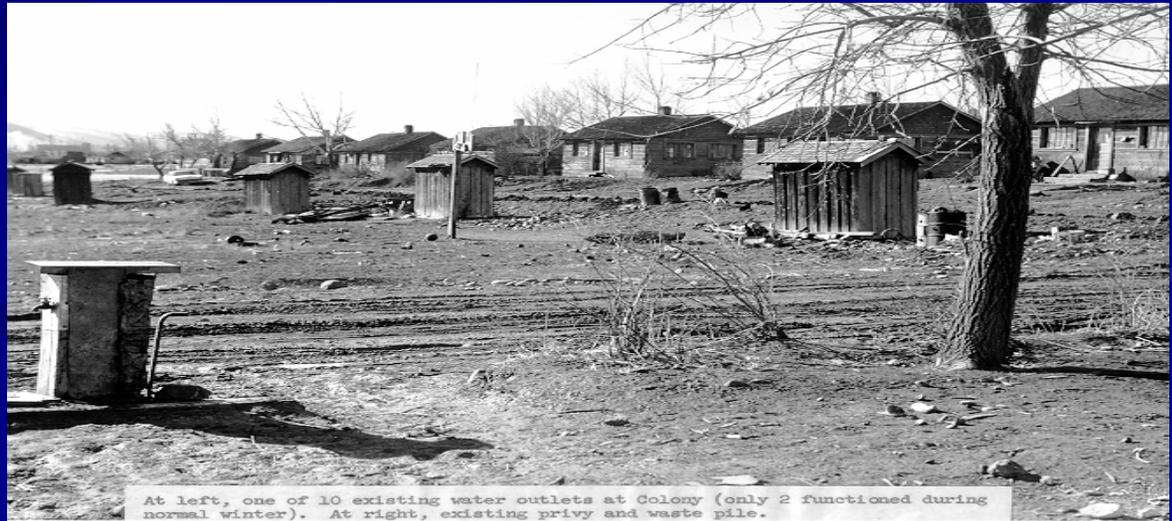
wSTARS Sanitation Tracking & Reporting System

1. CDP – Community Deficiency Profile
2. SDS – Sanitation Deficiency System
3. PDS – Project Data System
4. HPS – Housing Priority System
5. OMDS – Operation & Maintenance Data System
6. *HITS – Housing Inventory System



Community Deficiency Profile (CDP)

- Starting point for SDS
- Accounting of all tribal homes
- Include all units whether commercial, non-Indian, etc.
- Homes
 - 1,713 Community Profiles
 - 316,624 Community Homes All Def Levels
 - 38,692 Homes Without Potable Water



Community Deficiency Profile (CDP)

Switch to Community:

Community Details:

Community OKMULGEE	Comm. Code OK56737	District 02 - EASTERN	Field Office(s) <input type="button" value="Click to Select"/> Okmulgee (100.00%)		
Reservation None - 998	Service Unit 5052 - OKMULGEE (CLAREMORE)		EPA Unspecified	EPA PWS ID(s) None	
Tribe(s) <input type="button" value="Click to Select"/> CREEK NATION OF OKLAHOMA (100.00%)			Threshold Unit Cost \$33,000	Homes w/o Potable Water 4	

Descriptive Information

Four Tribal Comm. Bldg. needs water and sewer connections.

Oklahoma-Specific Attributes:

Local Code

001 -

Homes:

Location Description	Home Type	Number Homes	Water I.D.L.	Sewer I.D.L.	Solid I.D.L.	Comments
Okmulgee Indian Homes	E1 - Existing Homes	504	1	1	1	
IHS Eligible: <input checked="" type="checkbox"/> Comments:						
Creek Nation Comm. Bldgs	E2 - Non-Residential Units	4	4	4	1	
IHS Eligible: <input type="checkbox"/> Comments:						

DEFICIENCY LEVELS - ALL UNITS

	1	2	3	4	5
Water	504	0	0	0	4
Sewer	504	0	0	0	0
Solid Waste	508	0	0	0	0
Total Homes	508				

DEFICIENCY LEVELS - INDIAN UNITS *

	1	2	3	4	5
Water	504	0	0	0	0
Sewer	504	0	0	0	0
Solid Waste	504	0	0	0	0
Total Homes	504				

* Excludes home types E2, E3, and X1

What is SDS?

Sanitation Deficiency System (SDS)

- The inventory of sanitation facilities needs for existing homes.
- Projects prioritized by score within each Area.



SDS Requirements

- The 1988 amendments to the Indian Health Care Improvement Act (IHCIA) requires IHS to:
 - Maintain inventories of sanitation deficiencies for new and existing Indian homes and communities.
 - Prioritize the correction of deficiencies in the form of projects.
 - Annually report these deficiencies to Congress.
- The IHS developed the SDS to fulfill these requirements.
- IHS has reported deficiencies to Congress since 1989 in the form of projects.

SDS Project (Narrative)

Save Delete Narrative Report Record Comparison CPN/Scattered Exist. Homes W&S - OK63999-0012 Go

Last Submittal: 2006 (IHS National)

Project/Phase Name: CPN/Scattered Exist. Homes W&S
 Area: OKLAHOMA
 Tribe: CITIZEN BAND OF POTAWATOMI INDIAN TRIBE ...
 EPA Region: 06 EPA PWS ID: None

Number: OK63999-0012 [change](#) Priority: 10 Econ Feasible: Y
 Community: POTTAWATOMIE Project: 00 Override Feasibility: N
 District: EASTERN Phase: 12 IHS Reviewed: P
 Field Office: Citizen Potawatomi Self-Gov.: Title 5 Compact [Fund Proj.](#)
 HQ: Included (0)

OKLAHOMA Extra Fields
 Local Code: 005 - Ind Water & Sewer

Engineering Only: Engineer: Draper, Carrol Last Updated By: Budai Mark Last Update: 01/10/2006

DEFICIENCY LEVELS
 Initial: 4 Suggested: 4 Final: 1 Suggested: 1

RATING SCORES
 Health Impact: 22 Capital Cost: 9 Tribal: 16
 Deficiency: 18 O & M Capability: 10 Other Considerations: 0
 Previous Service: 4 Contribution: 4
 Total Score: 83

HOMES	Community State Code	Home Type	Eligible	Number of Homes	Initial Def. Level	Final Def. Level	First Service	Water Service	Sewer Service	Solid Waste Service	O & M Service		
Group A	OK63999	E1	Y	30	4	1	Y	Y	Y	N	N		
Group B	OK63999	E1	Y	5	4	1	Y	Y	Y	N	N		
				Total	35								

COSTS	IHS Cost	IHS Unit Cost	Eligible Cost	Eligible Unit Cost	Allowable Unit Cost	Contributions	Ineligible Cost	Total Cost
Water (W):	\$ 139,169	\$ 3,976	\$ 154,169	\$ 4,405	\$ 20,750	\$ 15,000		\$ 154,169
Sewer (S):	125,058	3,573	140,058	4,002	20,750	15,000		140,058
Solid (L):	0	0	0	0	0			0

SDS Data Overview – FY 2006

	<u>Total</u>	<u>Feasible</u>
# Projects	3,052	2,249
Costs	\$2.0 billion	\$990 million



PDS – Project Data System

- This is where funded projects are entered, tracked and managed.
- Projects to serve new homes, existing homes (SDS), special projects and emergency projects.
- PDS project funding is used to determine workload - RRM
- Fund 400-450 new projects/year
- Active Projects 4,900 (pending final report)
total - \$1.7 billion average - \$350,000
- Approx 12,770 total projects in PDS

PDS – Project Details



Home Community SDS **PDS** HPS Reports

Filter Reports

Current user: rhawasly

Project Details Milestones Homes Costs Fund Advice Funding Summary

Contact Us HELP Log Out

Add Project Save Project Delete Project

Navigation icons: Home, Back, Forward, Stop, Search. Search box: CAMERON SCATTERED - NA05P91 Go

Project Details

PDS Number:	NA05P91 (active) change number	SDS Project(s):	AZ03104-0501
Name:	CAMERON SCATTERED	Delivery Method :	IHS Direct Service
Engineer :	Adson Mathew	Eng Only:	<input type="checkbox"/>
Project Review	<input type="checkbox"/> Mark this Project Reviewed by Me	Last Review: 01/10/2006	Last Review By: Yazzie Colleen

Project Location

Community:	AZ03104 - CAMERON change community
Service Unit:	TUBA CITY
Reservation:	Navajo
District:	TUBA CITY
Field Office:	Tuba City
Tribe:	NAVAJO TRIBE OF ARIZONA, NEW MEXICO AND ...
EPA Region:	09

Estimated Costs

Water :	\$ 87,200
Sewer :	\$ 51,800
Solid Waste :	\$ 0
O & M :	\$ 0
Total:	\$ 139,000

Project Scope

Proj. Type:	R - Regular Project - existing homes
Scope:	5200 FEET OF SCATTERED WATERLINE. 6 INDIVIDUAL CONNECTIONS. 6 ST/DF INSTALLATIONS. 3 PLUMBING ROUGH-INS WITH FIXTURE SETTING. 1 HOMEOWNER REQUIRES AN INDIVIDUAL LAGOON; SERVED UNDER PROJECT
EPA SDWA/CWA Issues:	None

Funding Received

Record Count:	5
Total Funding:	\$ 139,000
RRM Amount:	\$ 139,000

Updated

Last Update:	01/10/2006
Update By:	System Administrator

PDS – Milestones

Project Phase	Milestone	Required By	Date (mm/dd/yyyy)			Percent Complete	
			Proposed	Revised	Actual		
-- Unspecified	Planning Agreement	Area			09/30/2004	100	X
-- Unspecified	Project Proposal	HQ			01/06/2005	100	X
-- Unspecified	Project Summary	HQ			04/07/2005	100	X
Phase 1	Environmental Review and Documentation	HQ			10/04/2005	100	X
Phase 1	Initial Environmental Determination	HQ			10/04/2005	100	X
Phase 1	Environmental Assessment	HQ					X
Phase 1	Environmental Impact Statement	HQ					X
-- Unspecified	MOA Signed	HQ			06/28/2005	100	X
Phase 1	Design Start	HQ					X
-- Unspecified	ROW	HQ			12/02/2005	100	X
-- Unspecified	Design End	HQ	02/24/2006				X
-- Unspecified	Construction Start	HQ	03/06/2006				X
Phase 1	Final Inspection	HQ	10/19/2006				X
-- Unspecified	Construction Complete	HQ	04/28/2006				X
-- Unspecified	As-Builts	HQ	11/18/2006				X
-- Unspecified	APLC	Area	02/15/2007				X
-- Unspecified	Transfer Agreement	HQ					X
-- Unspecified	Final Report	HQ					X

PDS – Homes



Home Community SDS **PDS** HPS OMDS Reports

Filter Reports Current user: rhawasly

Project Details Milestones **Homes** Costs Fund Advice Funding Summary

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Add Housing Group CAMERON SCATTERED - NA05P91

Housing Group	Community	Home Type	IHS Eligible	Estimated Homes To Be Served	Actual Homes Served To Date	IDL	FDL	First Service	Type of Service				Comments
									Water	Sewer	Sol. Waste	O & M	
A	CAMERON	E1 - Existing Homes	X	7		5	1	X	X	X			Edit <input type="button" value="X"/>
Total Homes				7	0								

PDS – Costs



Home Community SDS **PDS** HPS OMDS Reports

Filter Reports Current user: rhawasly

Project Details Milestones Homes **Costs** Fund Advice Funding Summary

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Show Line Item Details

 CAMERON SCATTERED - NA05P91

Facility Type	Funding Source	Eligible?	Funding Year	Housing Groups	Estimated			Actual			
					Qty	Unit Cost	Cost	Qty	Unit Cost	Cost	
Water, Other - General Estimate, Water	IHS Regular	Yes	2005	A	1	\$87,240.00	\$87,240.00	0	\$0.00	\$0.00	Edit <input type="button" value="X"/>
Sewer, Other - General Estimate, Sewer	EPA CWA Set-Aside	Yes	2005	A	1	\$51,760.00	\$51,760.00	0	\$0.00	\$0.00	Edit <input type="button" value="X"/>
Estimated Total: \$139,000.00								Actual Total: \$0.00			

PDS – Fund Advice



Home Community SDS PDS HPS OMDS Reports

Filter Reports Current user: rhawasly

Project Details Milestones Homes Costs Fund Advice Funding Summary

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Add Fund Advice Save Est. Expenditures PENO- FY SCATTERED - NS05HF5

Fund Source	Fund Year	CAN Number	Amount	Est. Expenditure	Est. Balance	Date of Entry	In IHS Finance?	RRM Eligible Amount	
IHS Housing	2005	J517HF5	\$210,000.00	\$ <input type="text"/>		05/31/2005	Yes	\$210,000.00	Edit x
FRS values:			\$210,000.00 obligated	\$87,580.00 disbursed					
Totals:			\$210,000.00	\$0.00	\$210,000.00				

NOTE: If valid FY and CAN number values are present, clicking on CAN number will display WebFRS data.

RRM Details

Funding Year	Amount	Year 2	Year 2 RRM (staff days)	Year 3	Year 3 RRM (staff days)	Year 4	Year 4 RRM (staff days)	Total Staff Days
2005	\$210,000.00	2007	90.000	2008	225.000	2009	135.000	450.000
Total Staff Days for Project:								450.000

RRM by Year

Fiscal Year	Staff Days	Staff Years
2007	90.000	0.409
2008	225.000	1.023
2009	135.000	0.614

OMDS – Operation & Maintenance Data System

- This is where information about water, sewer, solid waste systems (including open dumps) is stored.
- Future – Asset management for the tribe
- These are mainly tribally owned or operated systems
- General information on Systems:
 - Water Systems – EPA PWSID#, fluoride, location, population, capacity
 - Sewer Systems – location, population, capacity
 - Open Dumps – location, type, contents, health threat

OMDS - Filter



Home Community SDS PDS HPS **OMDS** Reports

System Filter Organization Filter Reports

Current user: rhawasly

[My STARS Prototype](#) [Contact Us](#) [HELP](#) [Log Out](#)

Filter

Show Filter Form

Tribal System?: Yes

Sorted By: FDS Ascending

Systems Matching Filter: 471

Add New System

FDS	System	Type	Tribal System	EPA ID	Open Dump	Organization	Co
2021300000	ALAMO - NORTH SITE DUMP	Solid Waste	Yes		X	No Organization Assigned	
2021300001	CHERRY TOWN	Solid Waste	Yes		X	No Organization Assigned	
2021300196	UFO DUMPSITE	Solid Waste	Yes		X	No Organization Assigned	
2022300000	DE LOS ALAMOS WASH	Solid Waste	Yes		X	No Organization Assigned	
2025301052	SUNSET	Solid Waste	Yes		X	No Organization Assigned	
2025301056	MOUNTAIN VIEW	Solid Waste	Yes		X	No Organization Assigned	
2025301111	CARRIZOZO	Solid Waste	Yes		X	No Organization Assigned	
8081260284	TSAILE/BLACK PINNACLE	Water	Yes	0400256		WATER DEVELOPMENT & MAINTENANCE DEPT.	
8081260287	ROUND ROCK NTUA CWS	Water	Yes	0403023		NAVAJO TRIBAL UTILITY AUTHORITY	
8081260331	LUKACHUKAI CWS	Water	Yes	0403047		NAVAJO TRIBAL UTILITY AUTHORITY	
8081260353	COTTONWOOD CWS	Water	Yes	0403021		NAVAJO TRIBAL UTILITY AUTHORITY	
8081260357	ROUGH ROCK COMM CWS	Water	Yes	0400396		NAVAJO TRIBAL UTILITY AUTHORITY	
8081260429	ROCK POINT CWS	Water	Yes	0403048		NAVAJO TRIBAL UTILITY AUTHORITY	

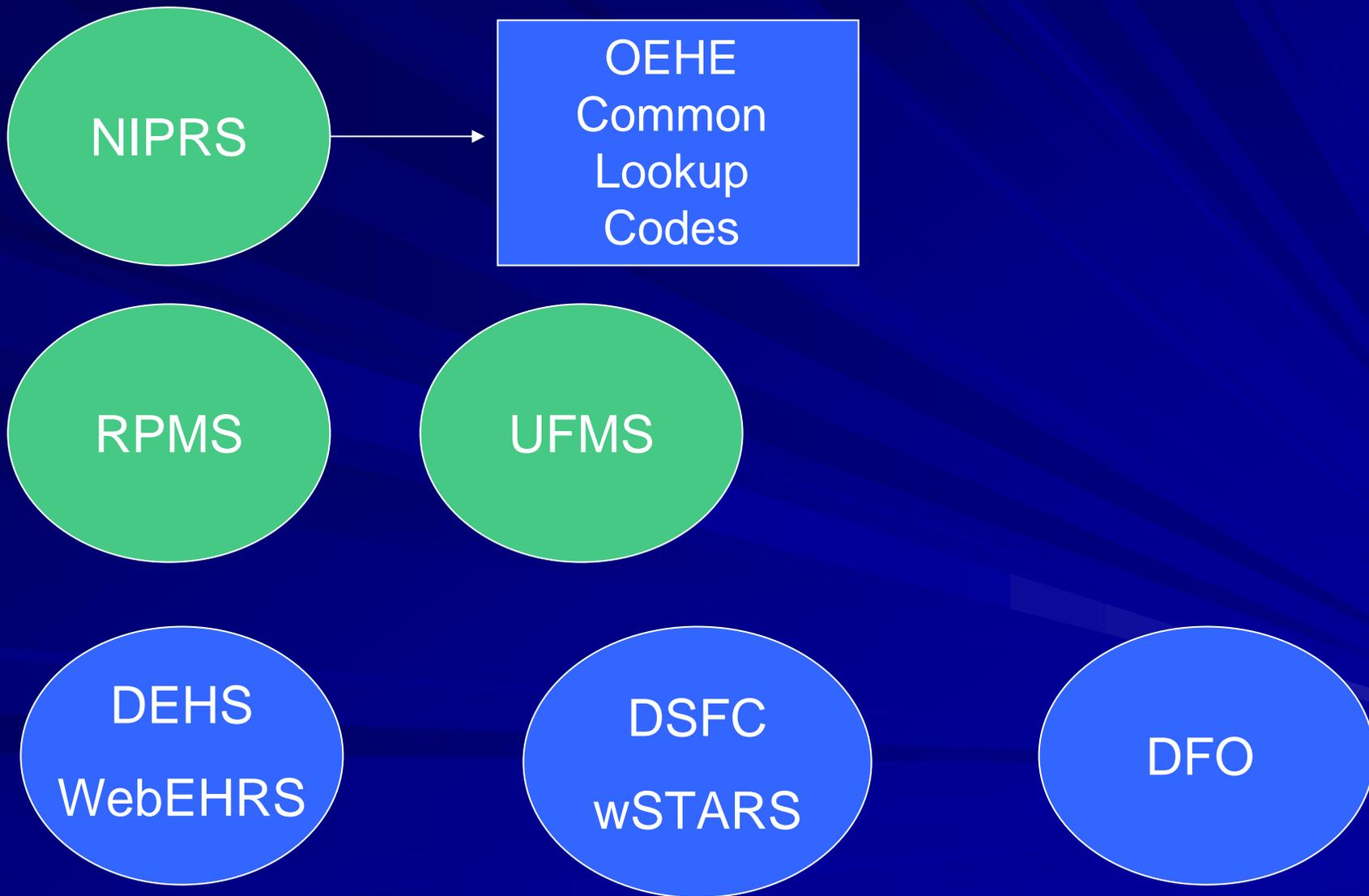
OMDS – Open Dump Example

System Details		Save System	Delete System	Add New System
General System Information				
System Type:	Solid Waste	Certified?	<input checked="" type="checkbox"/>	FDS: 8083300803 change
Name:	ASYAI DUMP			
Organization:	No Organization Assigned ()			
General Description:	ADDED BACK TO OMDS 2/16/99. FDS # PER ORR.			
	Up to 200 characters. Current count: 43			
Tribal System?:	<input checked="" type="checkbox"/>			
Location				
Communities:	None	--select community--		
		Sort By <input checked="" type="radio"/> Name <input type="radio"/> Code		
		<input type="button" value="Add Community"/>		
District:		Service Unit:		
Reservation:				
Field Office:				
Tribe:				
NAVAJO Extra Fields				
None Defined				
		Save System	Delete System	Add New System

Solid Waste	
Solid Waste System Type:	Active On-Reservation Open Dump
Open Dump?	<input checked="" type="checkbox"/>
Land Status:	Trust (Tribal)
Fenced Site?	<input type="checkbox"/>
N Latitude:	<input type="text"/> (Decimal)
W Longitude:	<input type="text"/> (Decimal)
Surface Area:	<input type="text"/> (Acres)
Contents:	Municipal Solid Waste
Health Threat:	Low Risk
Indian Pop:	<input type="text"/>
Non-Indian Pop:	<input type="text"/>

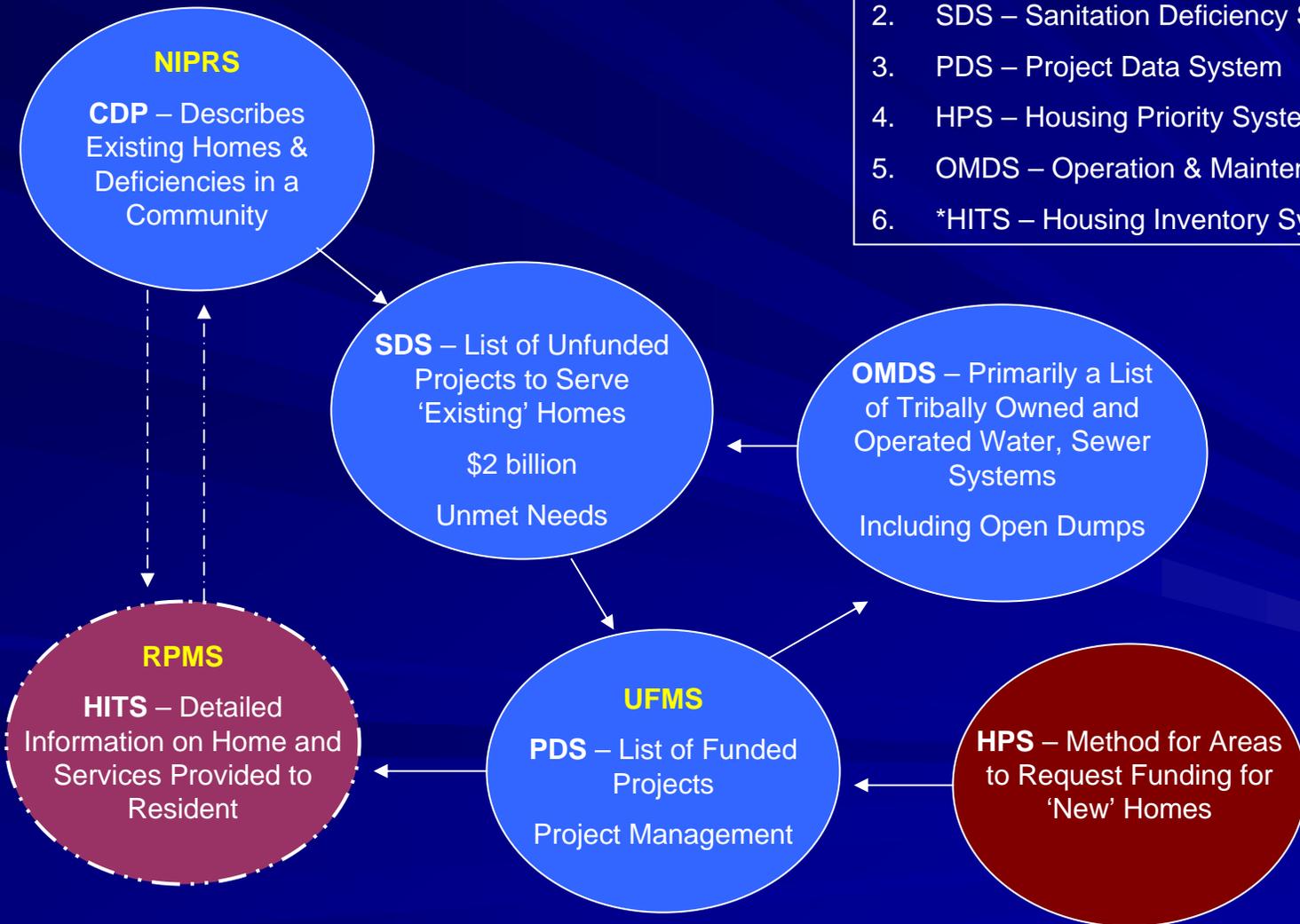
Save System	Delete System	Add New System
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OEH&E Integrated Concept



wSTARS Sanitation Tracking & Reporting System

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Questions

