

A stylized landscape illustration featuring rolling green hills in the foreground, a small tree with a brown trunk and purple and pink foliage on the left, and blue and white wavy hills in the background.

Navajo Nation Indian Health Service

Mick Koehmstedt, District Engineer

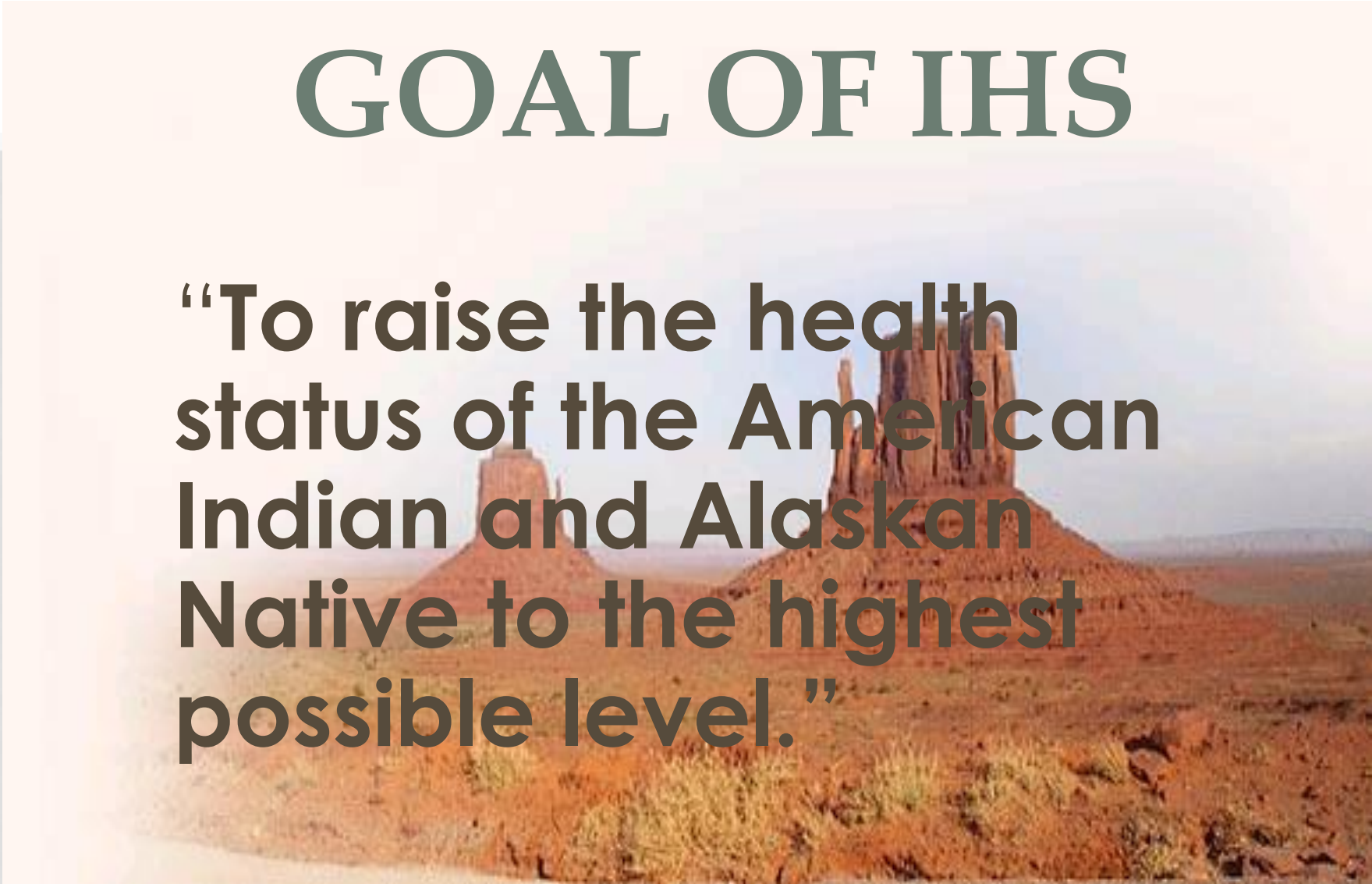
Navajo Area Indian Health Service Sanitation Facilities Construction Program Public Law 86-121

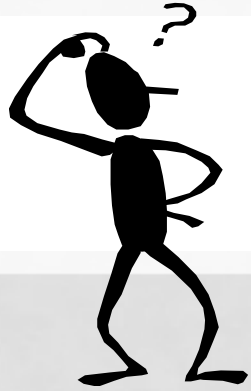


Regional Tribal Operations Committee (RTOC) Meeting
Twin Arrows Casino, Navajo Nation
August 5, 2015
Presented by
CAPT Michael Koehmstedt, PE, District Engineer

GOAL OF IHS

“To raise the health status of the American Indian and Alaskan Native to the highest possible level.”





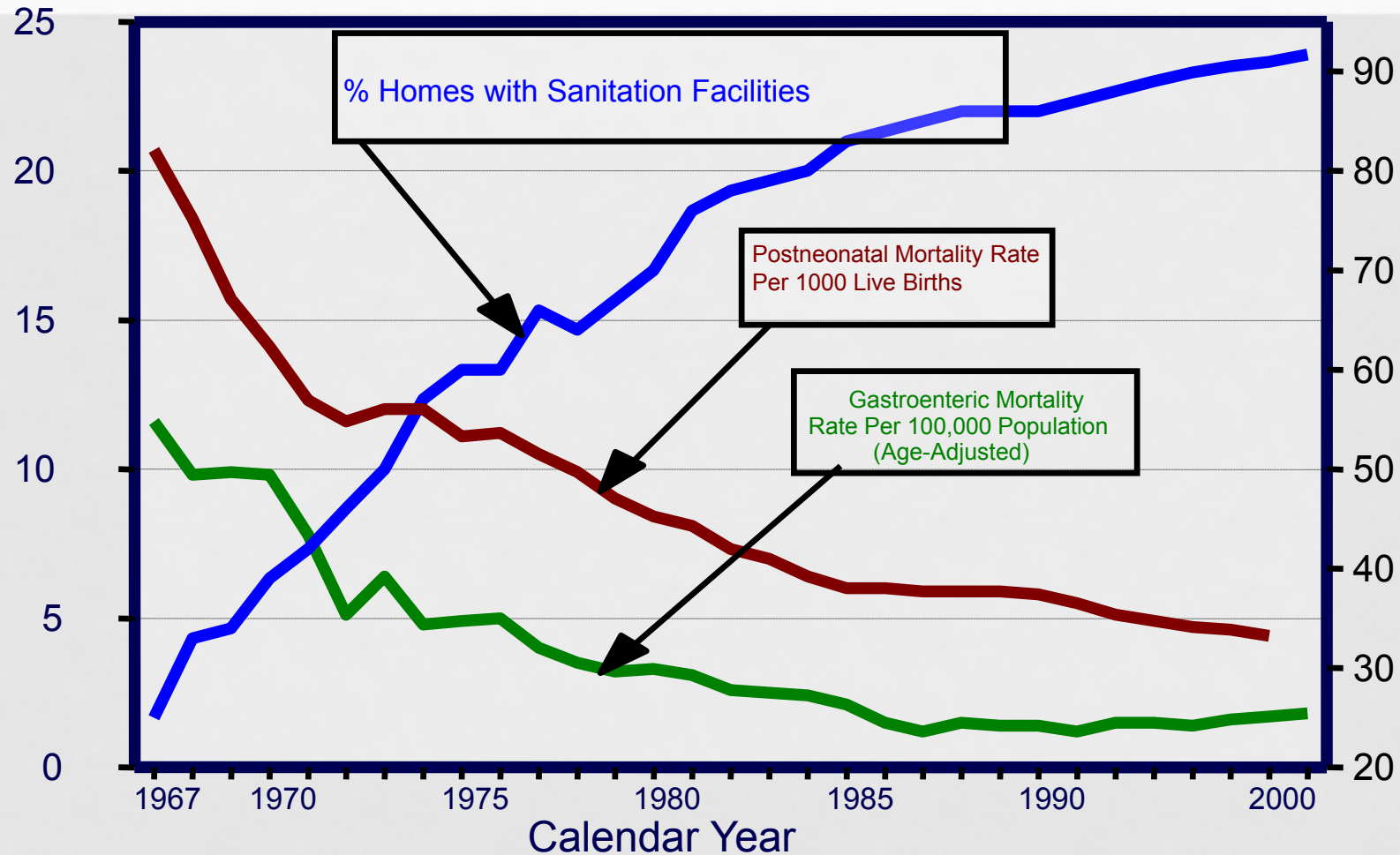
PUBLIC HEALTH FORMULA

Good sanitation = Less
disease **=** Better
health
& less
health care
costs

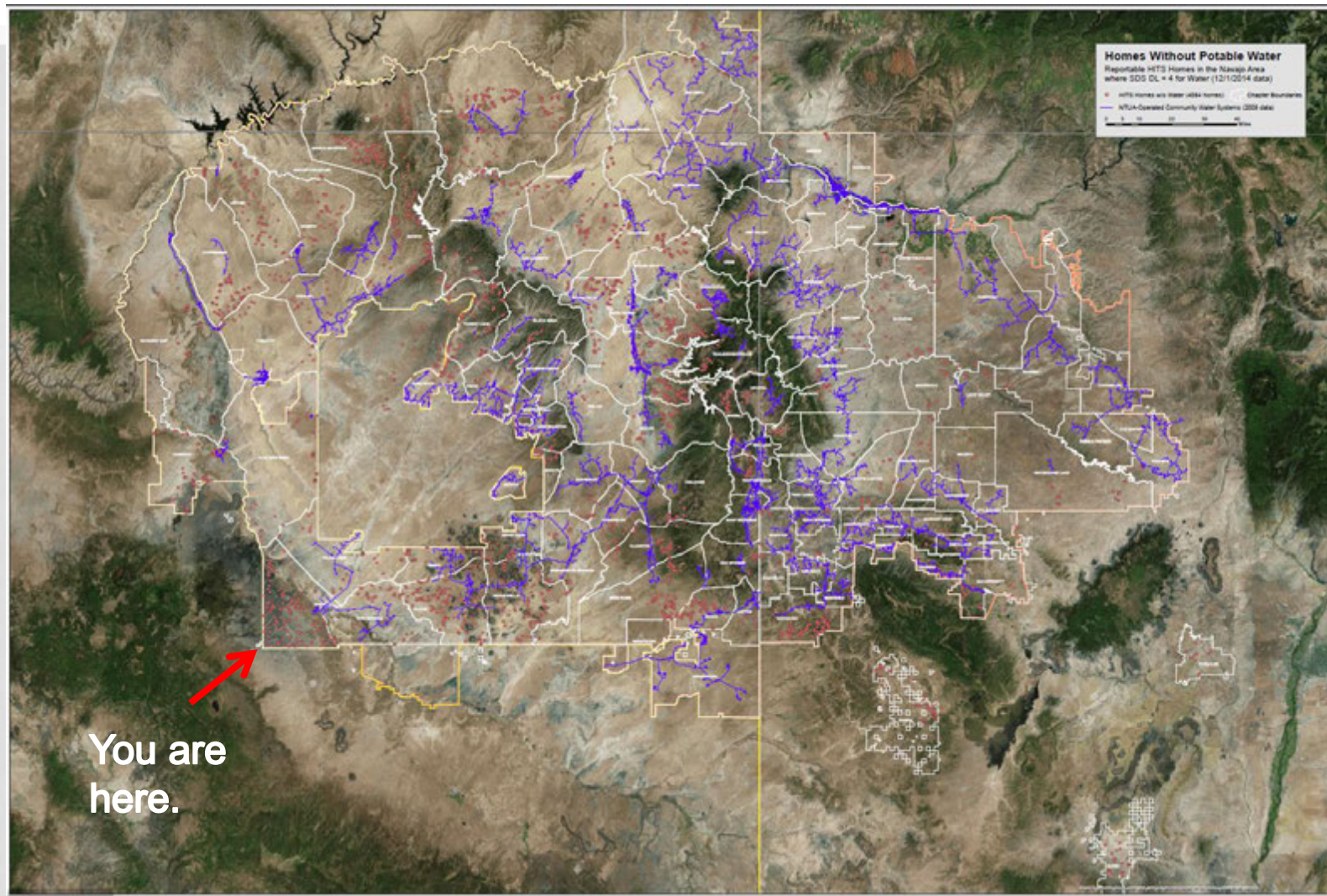
PUBLIC LAW 86-121

- **Indian Sanitation Facilities Act (1959)**
- **Authorizes Surgeon General to provide essential domestic and community sanitation facilities for Native Indian and Alaskan Natives**
- **Sanitation Facilities Construction (SFC) Program created within Indian Health Service (IHS) to provide facilities**

Gastroenteric and Postneonatal Mortality Rates Compared with Percent of Homes with Sanitation Facilities for American Indians and Alaskan Natives



MAP OF THE NAVAJO NATION NTUA WATER SYSTEMS AND HOMES WITHOUT POTABLE WATER (2014)

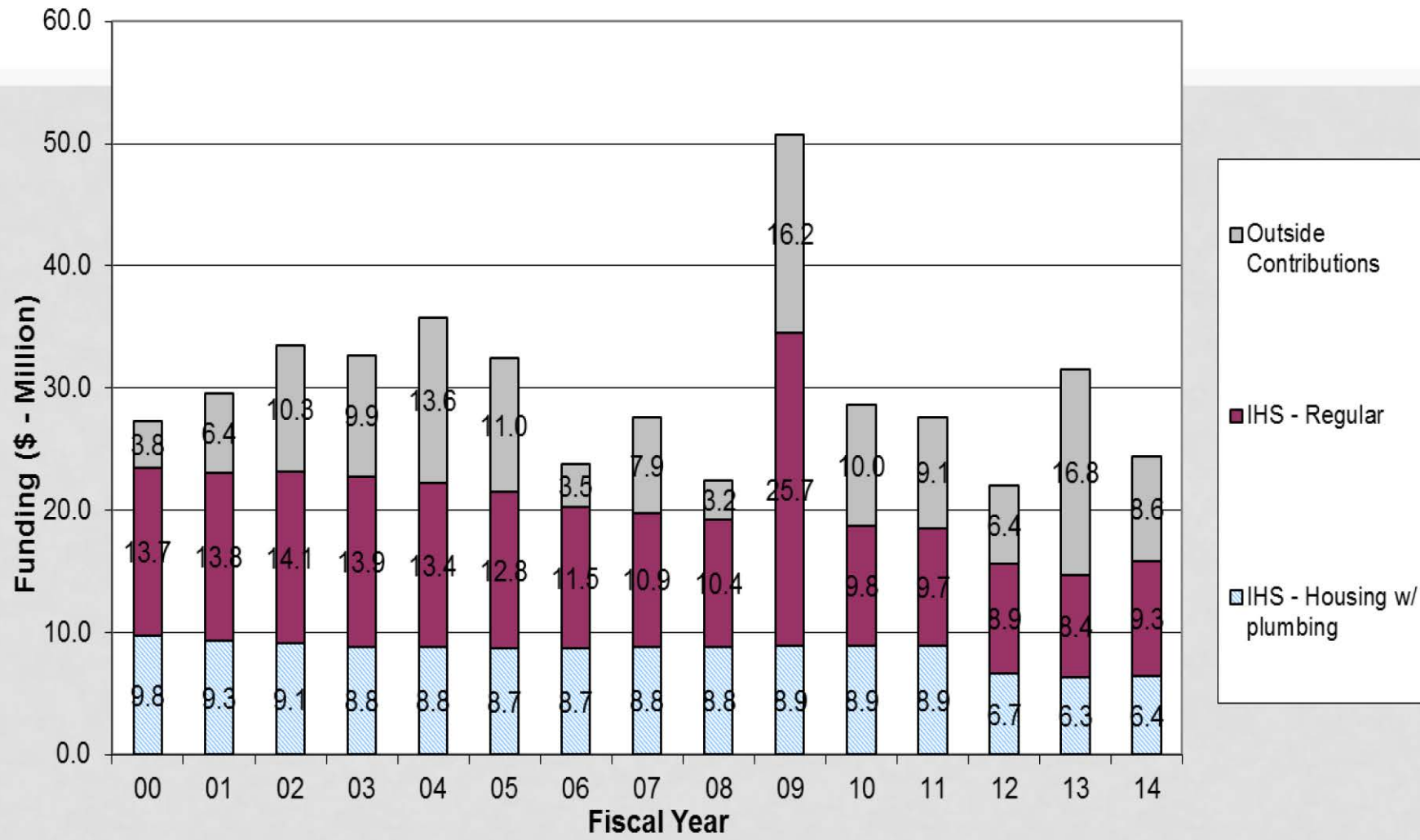


Navajo Area Sanitation Deficiency System (SDS)

(December 2014)

- SDS Navajo cost to correct all sanitation deficiencies (water, sewer, solid waste) = **\$707 million**
- SDS Navajo cost to correct all economically feasible (<\$84,500/home AZ) sanitation deficiencies = **\$345 million**
- 2014 SDS Navajo homes without potable water = **4,084**
- 2014 SDS Navajo homes with deficient (DL 4 & 5) wastewater facilities = **4,392** (includes failing drainfields)

TRENDS IN NAVAJO AREA SFC FUNDING 2000 - 2014



2014 SFC Construction Summary

Navajo Engineering and Construction Authority (NECA)

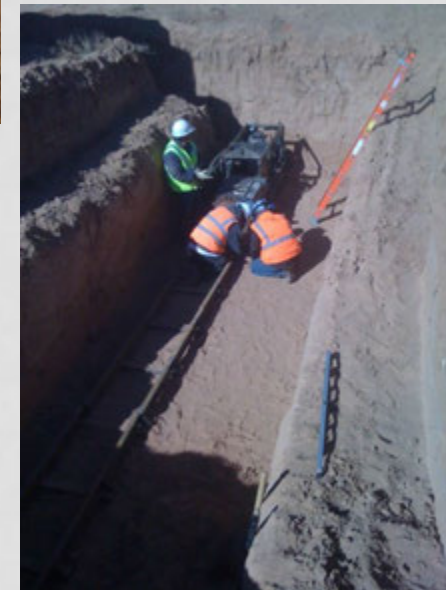
- Construction continues at a high rate with constructed expenditures at approx. \$24M. Construction quantities include:
 - 94 miles of water main (10", 8", 6", 4", and 2")
 - 14.2 miles of 4" sewer service line
 - 0.5 miles of sewer main
 - 150 houses plumbed
 - 686 septic and drainfield installations
 - 116 cistern water systems
 - 855 house water service connections
- For **FY2015** DSFC has completed \$21.4M in new project summaries and MOAs (61 projects) with \$4.978M in contributed funding from USEPA (CWA Indian Set-Aside funding).

Navajo Area USEPA-IHS Funded Projects

Clean Water Act (sewer) and Drinking Water Act Indian Set-Aside funding

PDS Project Number	FY	Project Name	Project Type	Program	Community	Estimated Homes	Estimated Total Cost
NA14XC4	2014	Shiprock Chapter Scattered T31	EPA Funded Project	Clean Water	SHIPROCK	5	\$27,000.00
NA14XC5	2014	Dennehotso Baby Rocks Scattered T24	EPA Funded Project	Clean Water	DENNEHOTSO	15	\$126,000.00
NA14XC6	2014	Burnham Scattered III T32	EPA Funded Project	Clean Water	BURNHAM	20	\$212,000.00
NA14XC7	2014	Crownpoint Service Unit Scattered T33	EPA Funded Project	Clean Water	CROWNPOINT	9	\$97,000.00
NA14XC8	2014	Pinon Scattered III T34	EPA Funded Project	Clean Water	PINON	10	\$157,000.00
NA14XC9	2014	Whippoorwill Area Scattered T35	EPA Funded Project	Clean Water	WHIPPOORWILL	8	\$100,000.00
NA14XD1	2014	Chinle Scattered T27	EPA Funded Project	Clean Water	CHINLE	12	\$206,000.00
NA14XD2	2014	Tuba City Scattered T10	EPA Funded Project	Clean Water	TUBA CITY	12	\$85,000.00
NA14XD3	2014	Gallup Scattered North & East Ph2 T36	EPA Funded Project	Clean Water	CHURCHROCK	7	\$92,000.00
NA14XD4	2014	Dennehotso Garnet Ridge Waterline Ext. XB4 T37	EPA Funded Project	Clean Water	DENNEHOTSO	60	\$271,000.00
NA14XD5	2014	Kaibeto Square Butte Ext. Ph2 R94	EPA Funded Project	Clean Water	KAIBETO	20	\$165,000.00
NA14XD6	2014	Gallup Scattered South & West Ph2 T38	EPA Funded Project	Clean Water	CHICHILTAH	14	\$179,000.00
NA14XD7	2014	Sweetwater Imm Mission SE Waterline T39	EPA Funded Project	Clean Water	SWEETWATER	15	\$83,000.00
NA14XD8	2014	Birdsprings Long Extension Dist. 5 T40	EPA Funded Project	Clean Water	BIRD SPRINGS	11	\$88,000.00
NA14XD9	2014	Monument Valley Mesa Tank Site Ext. T41	EPA Funded Project	Clean Water	OLJATOH	9	\$65,000.00
NA14XE1	2014	Jeddito Member Ext. T42	EPA Funded Project	Clean Water	JEDDITO	29	\$334,000.00
NA14XE2	2014	St. Michaels Sewer Rehab Phase 1 EPA Z56	EPA Funded Project	Clean Water	ST.MICHAELS	798	\$1,680,000.00
NA14XE3	2014	Shiprock Farm Area Sewer P... (Planning)	EPA Funded Project	Clean Water	SHIPROCK	146	\$50,000.00
NA14XE4	2014	Ramah Mtn View Lift Station	EPA Funded Project	Clean Water	RAMAH	37	\$166,000.00
NA14XE5	2014	FFO Failed DF V	EPA Funded Project	Clean Water	HUERFANO	24	\$286,000.00
NA14XE6	2014	Shiprock SU Failed Drainfield VII	EPA Funded Project	Clean Water	SHIPROCK	150	\$805,000.00
NA14XE7	2014	Tuba City Failed Drainfields	EPA Funded Project	Clean Water	TUBA CITY	53	\$579,000.00
NA10Y88	2010	Leupp/Grand Falls Test Drilling EPA	EPA Funded Project	Drinking Water	LEUPP	0	\$450,000.00
NA11Z21	2011	Rock Springs W/L Ext EPA R72 Z48	EPA Funded Project	Drinking Water	ROCK SPRINGS	15	\$584,000.00
NA11Z49	2011	Mexican Water Walker Ck R73 Z50	EPA Funded Project	Drinking Water	MEXICAN WATER	32	\$964,000.00
NA13XB9	2013	Gray Mountain Extension Ph1 EPA-DW XC1 T30	EPA Funded Project	Drinking Water	CAMERON	30	\$1,317,000.00

Projects NA-09-D12, R21 & Y68
Dennehotso Greasewood Flats/Baby Rocks
EPA Drinking Water funding = \$2,000,000
Total project cost = \$4.75 million



Project NA-13-Z61 (NN funded \$1M)
Gap to Cameron Intertie
Precursor to EPA Project NA-13-XB9 Gray Mountain



E16 LEUPP HARRISON AND THOMPSON SITES – SANDSTONE ROCK EXCAVATION



E61, Indian Wells, Lester site



E16 west Leupp – Jones site. Lava Rock excavation
– 4 ft. per hour.









WHITEHORSE LAKE R91- INSTALLATION OF A HOUSE SERVICE LINE



Standing Rock Sewer Lagoon Y79 - Spreading Bentonite mix for liner



Directional Pipe bore





Whitewater Service Line Trenching W/ Arch Monitoring



WHITEWATER CONCRETE SEPTIC TANK



QUESTIONS?



Photo: Project NA-09-S61 Sweetwater (EPA-ARRA funding)