

# Hanford Site Infrastructure

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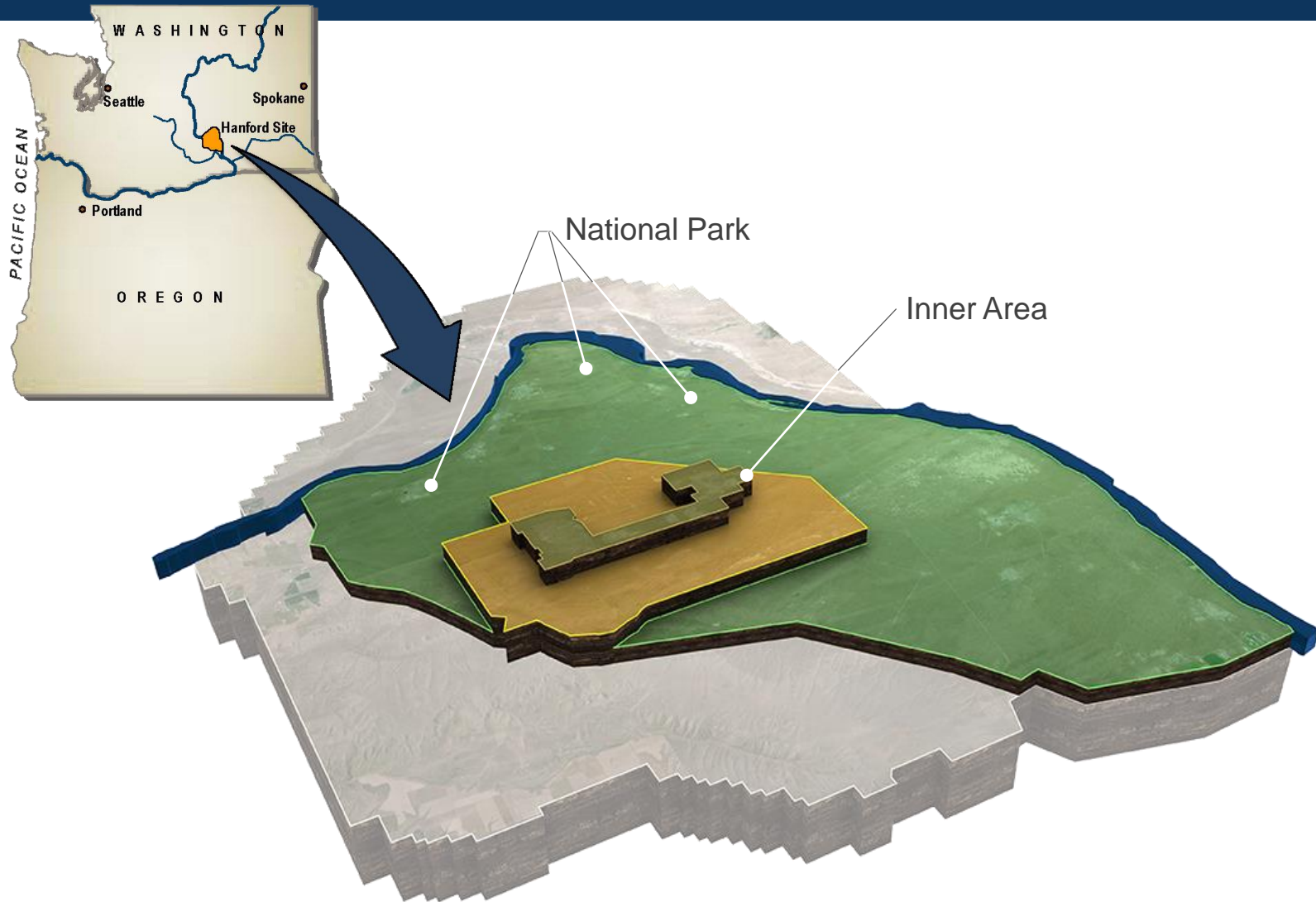
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**RICHLAND**  
**OPERATIONS OFFICE**  
United States Department of Energy

**MSA**  
Mission Support Alliance

# Hanford Site



# Hanford & Mission Support Alliance



Richland Operations Office



## MSA purpose



**Lead** Sitewide Integration



**Realize Innovations**  
and Cost Savings



**Right-Size** the Infrastructure



Excel in **Safe and Secure**  
Performance of Work



**Implement** Service Delivery Model



**Prepare** for the Future

## MSA



# Roads – Challenges & Needs

## Infrastructure

- 350 miles of primary roadway
- 7,669 average daily trips (entire site, average weekday)
- 10,000 freight items per month
- 1 million square yards of paved surfaces





# Electrical Utilities – Challenges & Needs

## Infrastructure

- 4 substations
- 600 transformers
- Nearly 6,000 wood poles
- Over 180 miles of electrical lines



# Water Systems – Challenges & Needs

## Infrastructure

- Over 100 miles of buried piping
- 4 pump houses, 4 major reservoirs, and 2 supplies from Columbia River
- 130,000 gpm combined pumping and 50M gallons storage
- 400M gallons of raw water annually

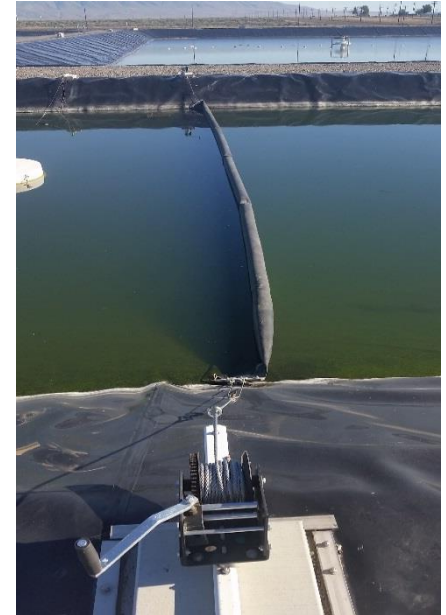




# Sewer System – Challenges & Needs

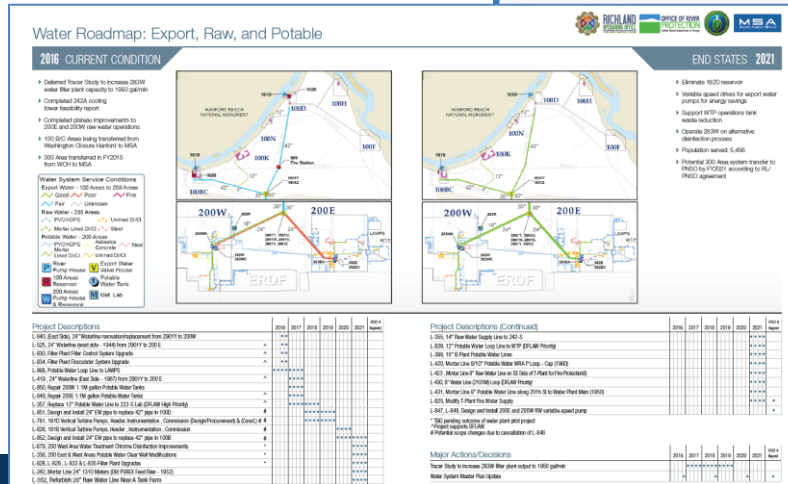
## Infrastructure

- 37 septic tanks and soil absorption systems
- 31 acre evaporation lagoon with 55,000 gallon capacity
- 10 equalization basin holding tanks



# Opportunity/Process

- User based services
- Integrated sitewide infrastructure planning
- Right-size the infrastructure
  - Mission assurance based reliability and redundancy
  - Just-in-time
- Integrated service delivery model
- Employee attrition
  - Connect Tri-Cities





# Sitewide Benefits

- Increased visibility of service delivery and understanding of conditions and infrastructure
- Infrastructure costs are now visible opposed to hidden on projects
- Modified behavior of excessive/under-utilized consumption on services through usage-based charging
- Cross-contractor collaboration improves overall delivery of services
- Realizing significant cost savings

# Cost Savings & Avoidance



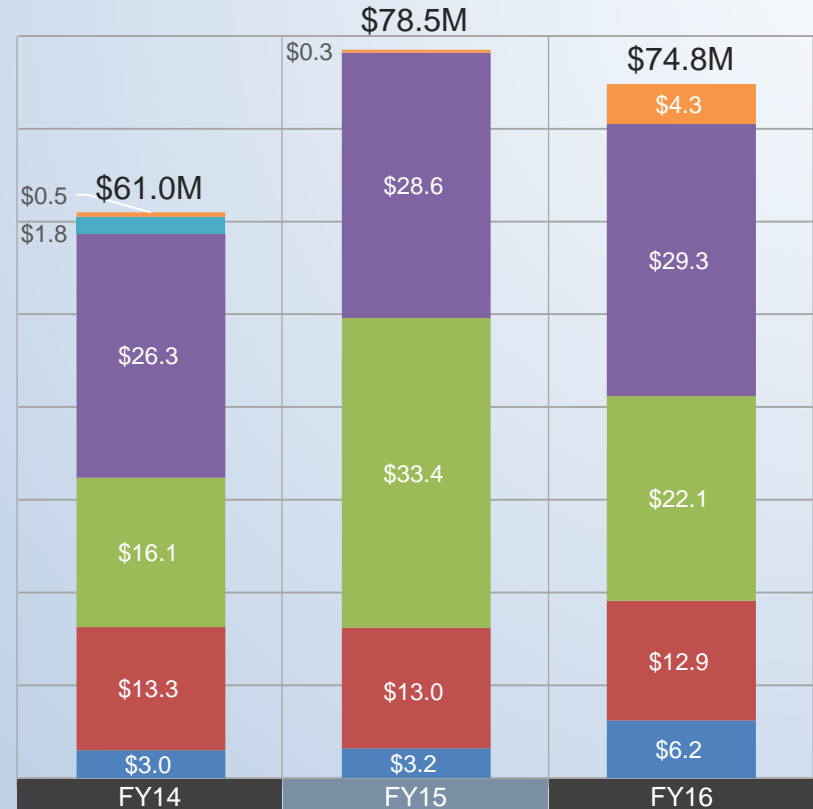
# Hanford Site Infrastructure

**Thank you**



# FY14-FY16 Cost Savings & Avoidance Summary

- Fernald legacy benefits
- Scope absorption without additional funding
- Workforce restructuring – from prior years
- Operating excellence and innovations
- Hanford benefits – funding strategy
- Labor skill mix and strategy



All cost savings and avoidance artifacts are provided to DOE annually