



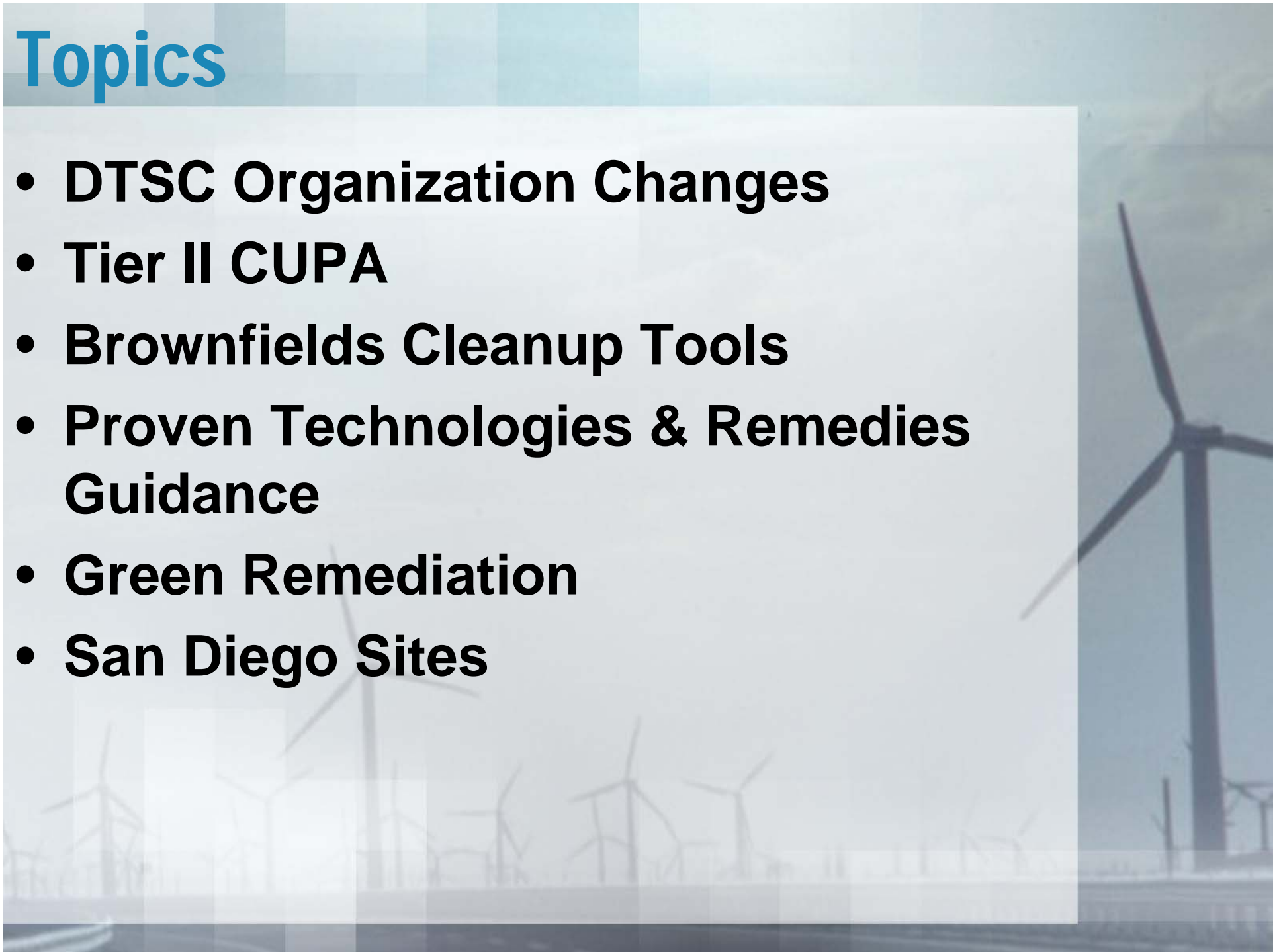
DTSC Brownfields and Environmental Restoration Program Update

SAM Fall Forum
San Diego, CA
September 16, 2010

John Scandura
Performance Manager
Department of Toxic Substances Control
Cypress Office

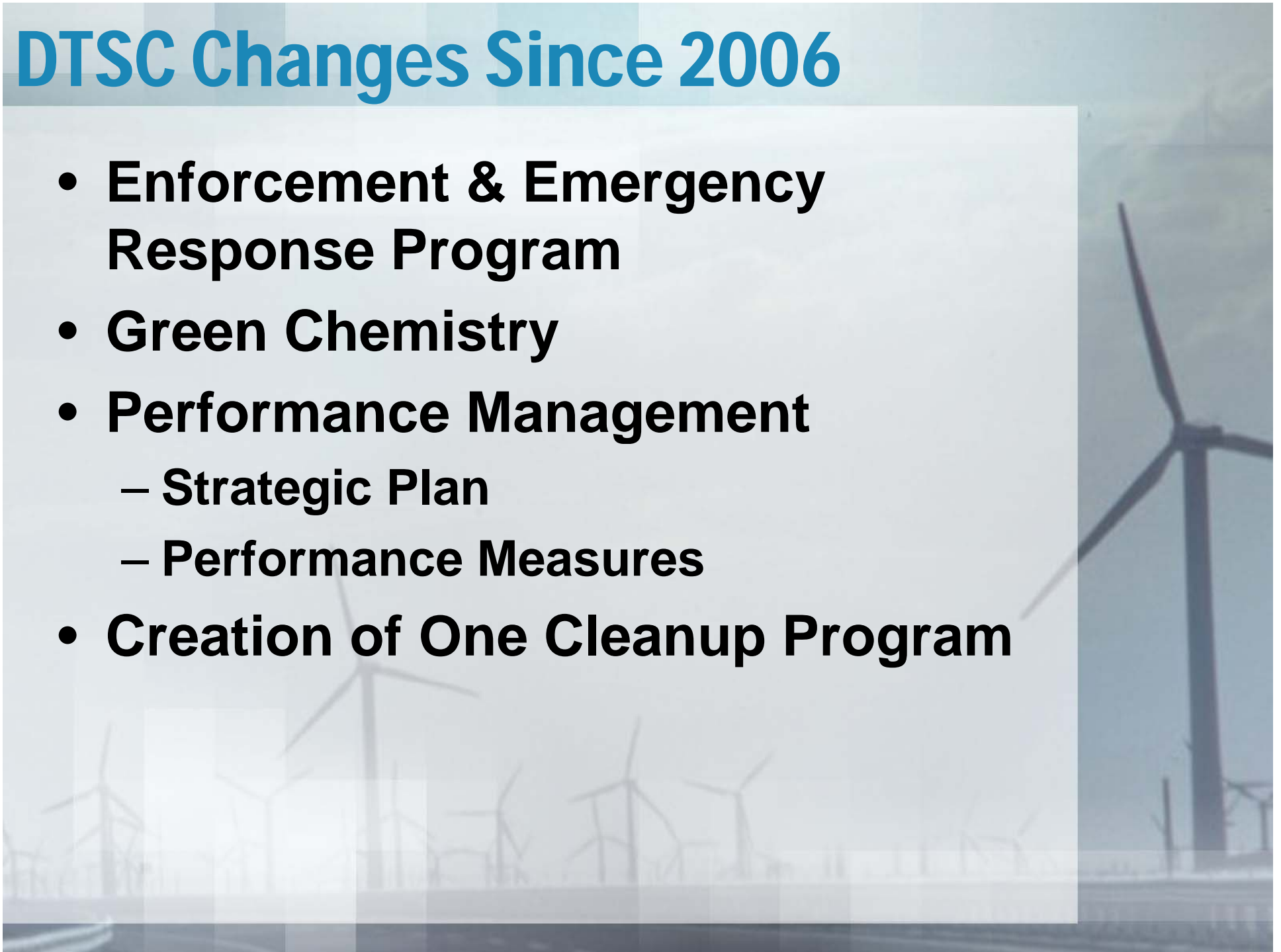
Topics

- **DTSC Organization Changes**
- **Tier II CUPA**
- **Brownfields Cleanup Tools**
- **Proven Technologies & Remedies Guidance**
- **Green Remediation**
- **San Diego Sites**



DTSC Changes Since 2006

- **Enforcement & Emergency Response Program**
- **Green Chemistry**
- **Performance Management**
 - **Strategic Plan**
 - **Performance Measures**
- **Creation of One Cleanup Program**



Brownfields and Environmental Restoration Program

- RCRA Sites
- Tiered Permitting
- State Superfund Sites
- Military Facilities
- NPL Sites
- School Sites
- Brownfields Sites
- Facility Permitting

Brownfields and Environmental Response Program Organization

Maziar Movassaghi
Acting Director

Stewart Black
Acting Deputy Director

**Regional
Cleanup Offices**

- Sacramento (2)
- Berkeley
- Clovis
- Chatsworth
- Cypress (2)

**Human and
Ecological Risk
Office**

**Geological
Services Office**

**Engineering
Services Office**

**Permitting
Office**

- Permit Oversight
- Landfills
- TSD Facilities
- Used Oil & Tanks
- Permit Appeals

Tier II Certified Unified Program Agency

- **CUPA's currently oversee remediation at limited sites**
- **Tier II CUPA's oversee environmental assessments and corrective action at sites with**
 - **Soil and groundwater contamination**
 - **Risk Assessment required**
- **Advantages to Tier II Status**
 - **Oversee corrective action within jurisdiction**
 - **Agencies can recover oversight costs**

Tier II CUPA's

- **DTSC Approves Applications**
 - Personnel and Experience
 - Program Capabilities
- **Authorized Tier II CUPA's**
 - Los Angeles County
 - Merced County
 - Ventura County
- **Applications Submitted**
 - San Mateo County
 - San Diego County



Brownfields Tools

- **Voluntary Cleanup Agreements**
- **Consultative Services Agreements**
- **CLRRRA Agreements**
 - **Prospective Purchaser**
 - **Liability Relief**
- **Targeted Site Investigation Program**
 - **~\$500,000 per year for assessment grants**
 - **Local agencies, school districts, non-profits**



More Brownfields Tools

- **Revolving Loan Fund**
 - \$4.8 Mil U.S. EPA Grant
 - Low interest loans for Brownfields cleanups (not investigation)
 - Private and public entities eligible
- **Cleanup Loans and Environmental Assistance to Neighborhoods (CLEAN) Program**
 - Low interest loans for preliminary endangerment assessments and site cleanups
 - Expected to be available in 2011

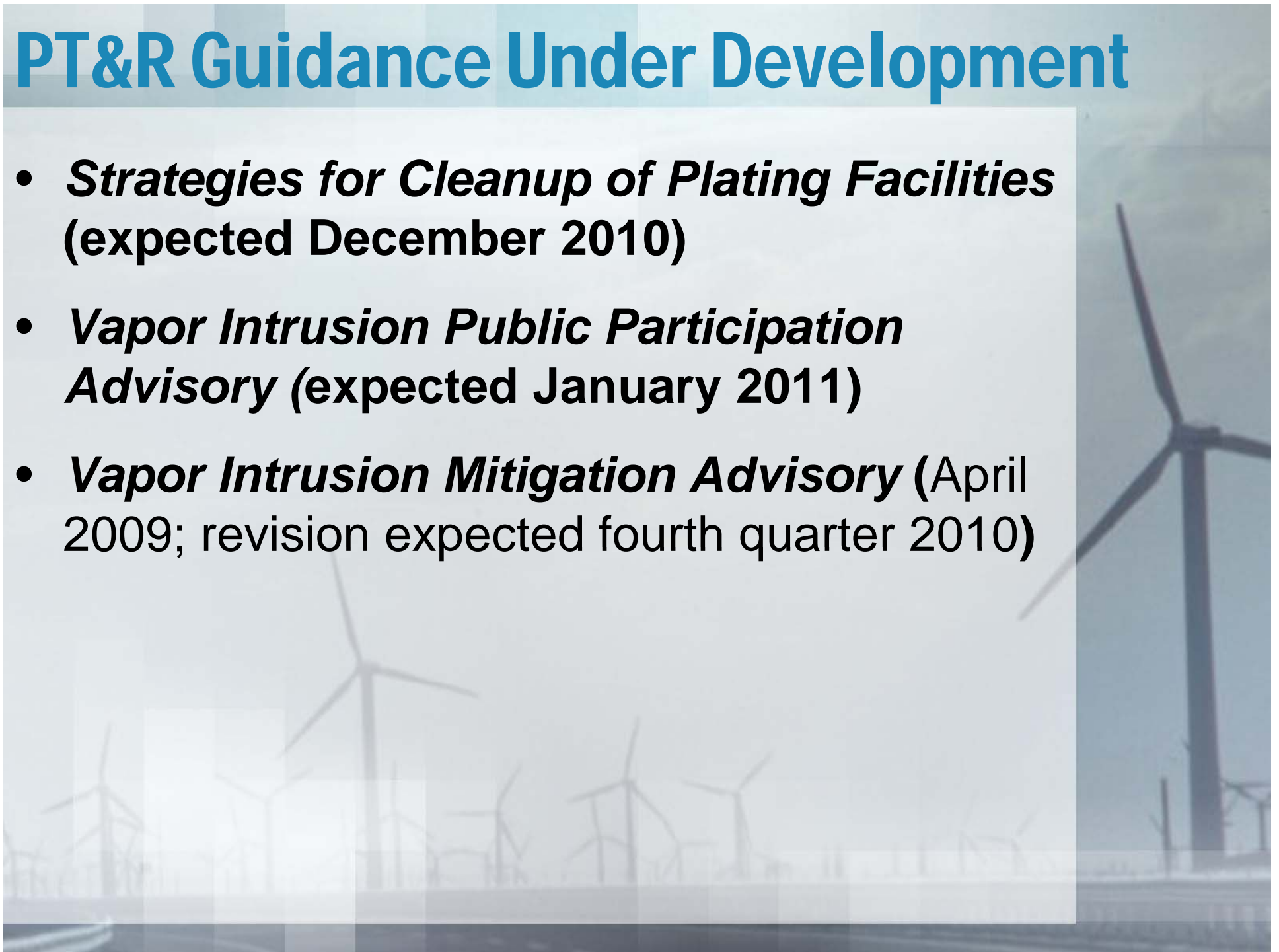


Proven Technologies & Remedies (PT&R) Guidance

- ***Remediation of Metals in Soil*** (August 2009)
- ***Remediation of Organochlorine Pesticides in Soil*** (February 2010)
- ***Remediation of Chlorinated VOCs in Vadose Zone Soil*** (April 2010)
- ***Vapor Intrusion Mitigation Advisory*** (April 2009)
- **Available at:**
www.dtsc.ca.gov/SiteCleanup/PTandR.cfm

PT&R Guidance Under Development

- ***Strategies for Cleanup of Plating Facilities*** (expected December 2010)
- ***Vapor Intrusion Public Participation Advisory*** (expected January 2011)
- ***Vapor Intrusion Mitigation Advisory*** (April 2009; revision expected fourth quarter 2010)



DTSC Green Remediation Team

- **Formed in 2007**
- **Pilot Projects with SURF**
- **Advisory Released in December 2009**
 - Intended for regulators, consultants, project proponents
 - Introduces sustainability, life-cycle thinking to remediation process
 - Evaluation Matrix
 - Available on DTSC website at:
http://www.dtsc.ca.gov/OMF/upload/GRT_Draft_Advisory_20091217_ac1.pdf

Green Remediation Evaluation Matrix (GREM) *				
Stressors	Affected Media	Mechanism/ Effect	Y/N **	Score
Substance Release/Production				
Airborne NOx & SOx	Air	Acid rain & photochemical smog		
Chloro-fluorocarbon vapors	Air	Ozone depletion		
Greenhouse gas emissions	Air	Atmospheric warming		
Airborne particulates/toxic vapors/gases/water vapor	Air	General air pollution/toxic air/humidity increase		
Liquid waste production	Water	Water toxicity/sediment toxicity/sediment		
Solid waste production	Land	Land use/toxicity		
Thermal Releases				
Warm water	Water	Habitat warming		
Warm vapor	Air	Atmospheric humidity		
Physical				
Soil structure disruption	Land	Habitat destruction/ soil Infertility		
Noise/Odor/Vibration/Aesthetics	General environment	Nuisance & safety		
Traffic	Land; general environment	Nuisance & safety		
Land Stagnation	Land; general environment	Remediation time; cleanup efficiency; redevelopment		
Resource Depletion/Gain				
Petroleum (energy)	Subsurface	Consumption		
Mineral	Subsurface	Consumption		
Construction materials	Land	Consumption/reuse		
Land & space	Land	Impoundment/reuse		
Surface water & groundwater	Water, land (subsidence)	Impoundment/ sequester/reuse		
Biology resources (plants/trees/animals/microorganisms)	Air, water, land/forest, subsurface	Species disappearance/ diversity reduction regenerative ability reduction		

Green Remediation – National Efforts

- **U.S. EPA**
- **Military**
- **ASTM Developing Certification Protocols**
- **ITRC Developing Guidance and Training**
- **Sustainable Remediation Forum (SURF)**
- **Association of State and Territorial Solid Waste Management Officials (ASTSWMO)**



ASTSWMO Papers

- **Green Remediation Myth Busters (Aug. 2009)**
- **Incorporating Greener Cleanups into Remedy Reviews (Aug. 2009)**
- **Implementing Greener Cleanups Strategies in the States (Jan. 2009)**
- **Incentives for Greener Cleanups (June 2009)**
- **http://www.astswmo.org/resources_sustainability_greenercleanups.html**

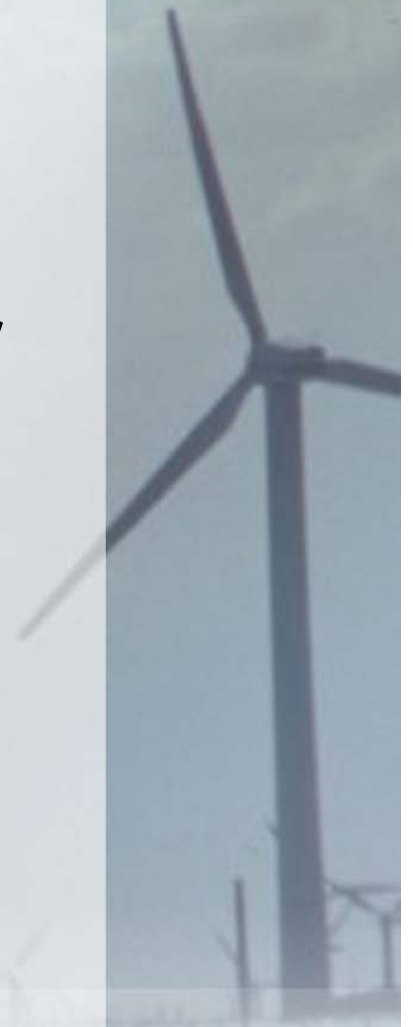
DTSC Sites in San Diego County

- **Active Military Bases – 11**
- **Formerly Used Defense Sites – 14**
- **Non-RCRA Corrective Action – 10**
- **RCRA Corrective Action – 10**
- **School Site Evaluation – 9**
- **Site Evaluation – 5**
- **Voluntary Cleanup - 5**
- **State Response – 4**
- **Total - 68**

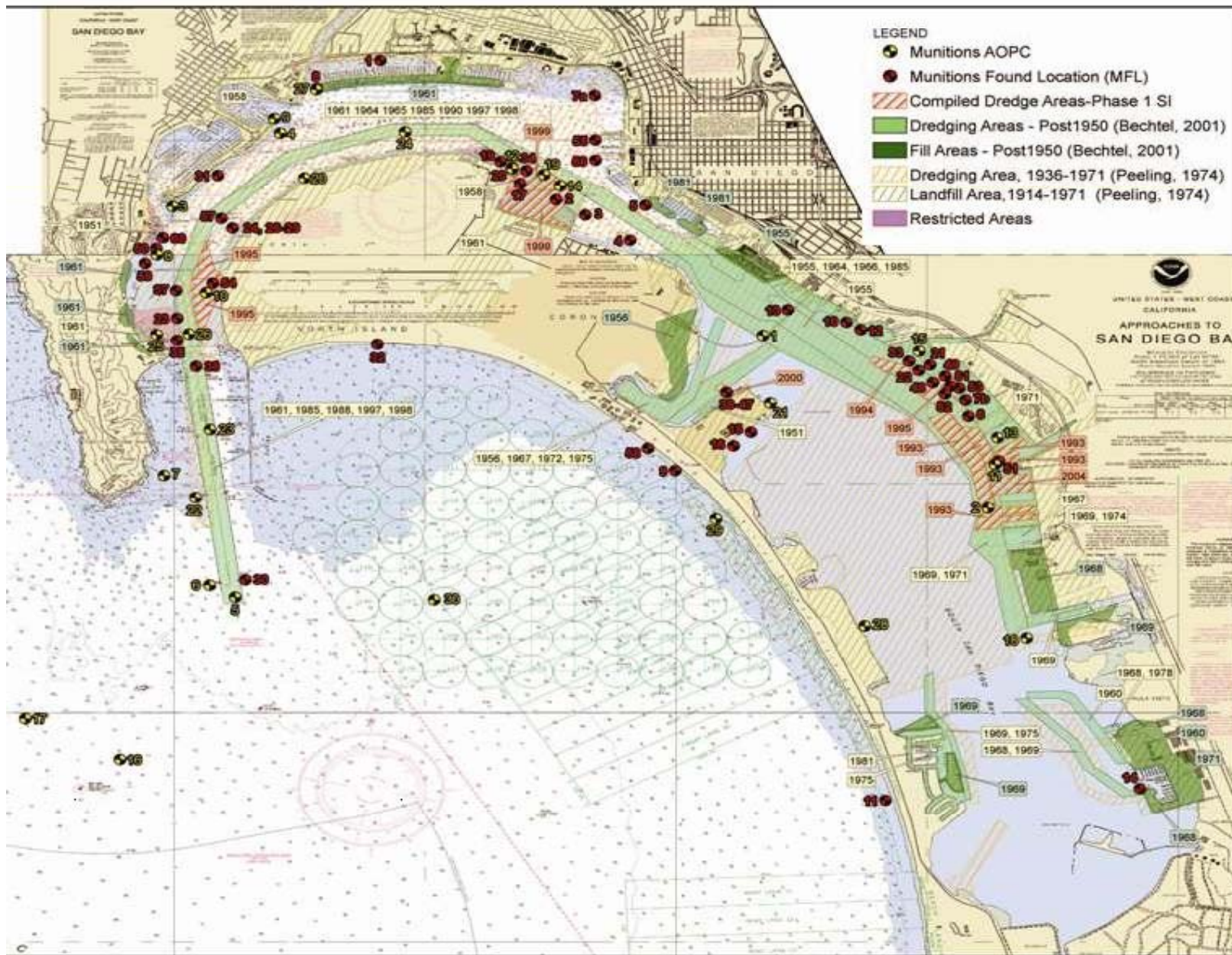


Bay Munitions Project

- Discarded munitions in bay
- Problem discovered in 1997
- 2001 PA found 64 areas needed further evaluation
- Workplan under review, proposed under water survey using
 - Side Scan Sonar
 - Magnetometer
 - Remotely operated video scanner
- Expected to Commence in 2011

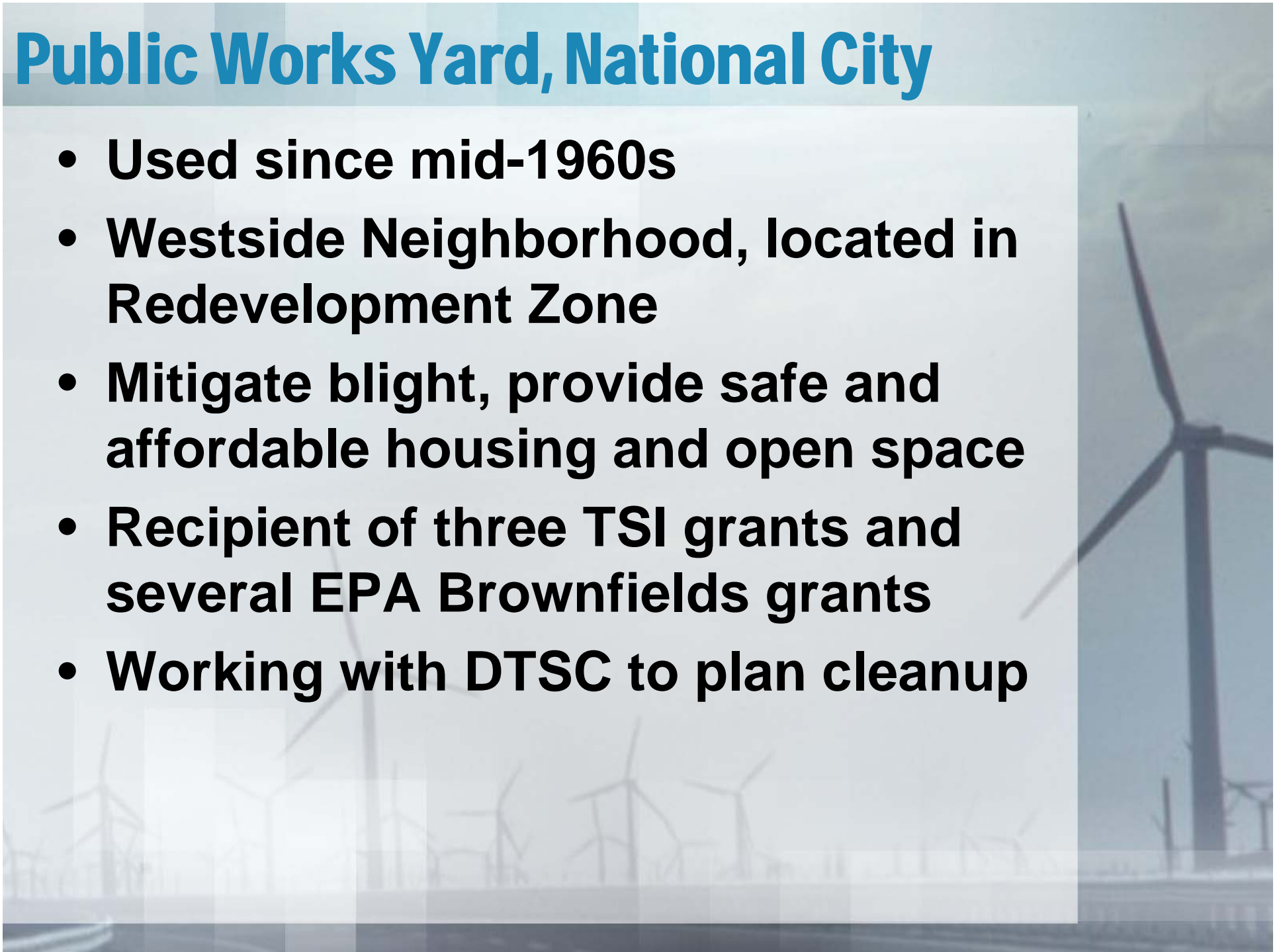


Site 100 Study Area



Public Works Yard, National City

- **Used since mid-1960s**
- **Westside Neighborhood, located in Redevelopment Zone**
- **Mitigate blight, provide safe and affordable housing and open space**
- **Recipient of three TSI grants and several EPA Brownfields grants**
- **Working with DTSC to plan cleanup**



Public Works Yard, National City - Today



Public Works Yard, National City – The Future

CONCEPTUAL PARADISE CREEK HOUSING STUDY NATIONAL CITY, CALIFORNIA THE RELATED COMPANIES OF CALIFORNIA

- SITE 1**
 - 1.00 PLANT 1 - 100 SF
 - 1.01 PLANT 2 - 100 SF
 - 1.02 PLANT 3 - 100 SF
- SITE 2**
 - 2.00 PLANT 1 - 100 SF
 - 2.01 PLANT 2 - 100 SF
 - 2.02 PLANT 3 - 100 SF
- SITE 3**
 - 3.00 PLANT 1 - 100 SF
 - 3.01 PLANT 2 - 100 SF
 - 3.02 PLANT 3 - 100 SF
- SITE 4**
 - 4.00 PLANT 1 - 100 SF
 - 4.01 PLANT 2 - 100 SF
 - 4.02 PLANT 3 - 100 SF



Groundworks San Diego – Chollas Creek

- **Nonprofit organization in partnership with EPA and National Park Service’s Rivers, Trails and Conservation Assistance Program**
- **Mission to bring sustained regeneration and management of the environment through community-based partnerships.**
- **Leading development of Chollas Creek Earthlab, a 5-acre outdoor classroom along Chollas Creek.**
- **Air, soil, and water contamination concerns from prior land use and freeway pollution**
- **Proposed for Targeted Site Investigation.**



A photograph of a wind farm with numerous wind turbines stretching across a flat landscape under a cloudy sky. The image has a blue-tinted, semi-transparent overlay.

Questions?