



Linking Conservation & Planning

FAISAL HAMEED

PROGRAM MANAGER

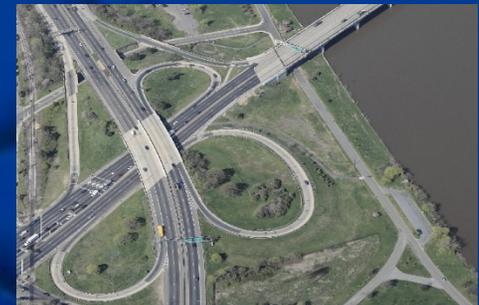
SUSTAINABILITY, PROJECT DEVELOPMENT &
ENVIRONMENTAL REVIEW



d.

District Department of Transportation

- Plans, designs, constructs, and maintains a safe and efficient Multimodal Transportation System for the District using a Context Sensitive Approach.
- Manages District's Snow Removal Operation.
- Coordinates with WMATA for District's mass transit services.



DDOT Mission

Provide reliable transportation facilities and services for residents, commuters, and businesses so they can move safely and efficiently, while enhancing quality of life and economic competitiveness.



DDOT Environmental Policy

- DDOT is committed to practicing Environmental Excellence as it fulfills its mission to enhance the quality of life for the DC residents, businesses, & visitors by ensuring that people, goods, & information move efficiently and safely, with minimal adverse impacts on the environment.

DDOT is committed to:

- Using resources efficiently
- Developing transportation projects and conducting operations in an environmentally sustainable manner.



Conservation
Preservation and
careful management
of the environment
and of natural
resources



Transportation Planning

Planning of transportation system, facilities, & networks that includes a comprehensive consideration of possible strategies; an evaluation process that encompasses diverse viewpoints; the collaborative participation of relevant transportation-related agencies and organizations; and open, timely, and meaningful public involvement. (FHWA)



**Transportation
Planning**



**Sustainable
Transportation**

Conservation



**Transportation
Planning**

**How do we
combine the
two**

Conservation

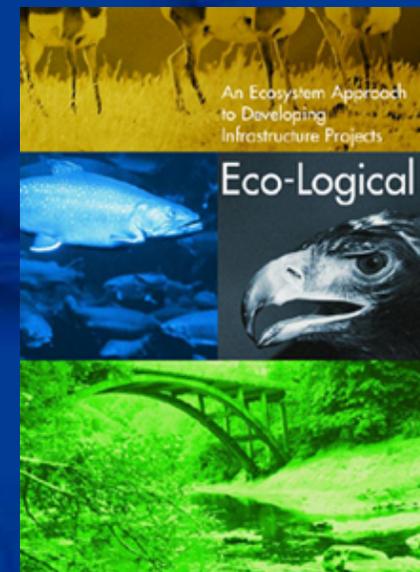


Examples

- Green Highways Partnership



- Eco-logical



- Linking Planning & NEPA



Regulations

SAFETEA-LU Section 6001:

Metropolitan and long-range transportation plans must be developed in consultation with state & local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation, as appropriate. The consultation must include a comparison of transportation plans with available state conservation plans or maps and inventories of natural or historic resources.

These transportation plans must include a discussion of potential environmental mitigation activities, to be developed in consultation with federal, state, and tribal wildlife, land management, and regulatory agencies.





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& Planning
Practices



Partnerships & Agency
Coordination



Corridor Plans



Linking Planning & NEPA



Sustainability Plan



Management Plans

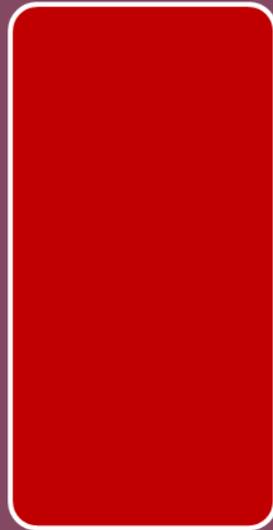


Environmental Management
System





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& Planning



**Partnerships
& Agency
Coordination**

d.

Agency Meetings & Agreements

- Regular meetings with
 - FHWA
 - Environmental Protection Agency
 - National Park Service
 - DC State Historic Preservation Office
 - U.S. Fish & Wildlife
 - Corps of Engineers
 - DC Department of Environment





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Corridor Plans



GREAT STREETS INITIATIVE



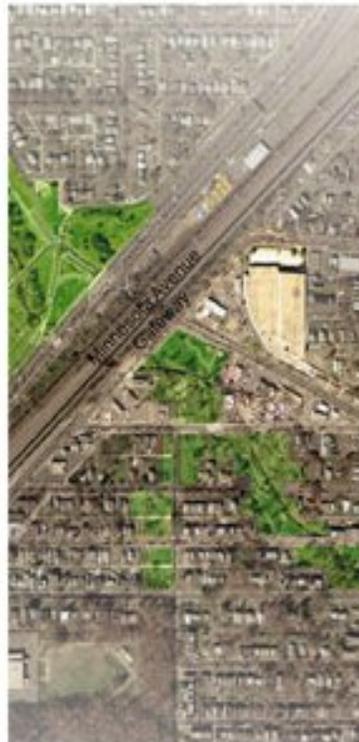
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GREAT STREETS INITIATIVE

GREAT STREETS INITIATIVE	Corridor Alternatives			L'Enfant Square Alternatives		
	4-Lanes with median & multi-use trail	4-lanes with bike lanes	5-lanes with reversible lane	Ellipse	Modified square	Conventional
OVERALL GREAT STREETS RANKING						
ENERGIZE Strengthen business and other local institutions and services <ul style="list-style-type: none"> • Number of on-street spaces • Proximity to commercial 						
REFRESH Integrate and conserve natural resources, and create valuable open spaces <ul style="list-style-type: none"> • Green space quantity • Green space quality • Green space opportunity for variety • Tree canopy & tree location • Environmental 						
MOVE Create a sustainable transportation network, with many travel options <ul style="list-style-type: none"> • Pedestrian circulation / connectivity • Pedestrian safety • Pedestrian inviting and efficient • Bicycle operations • Vehicular safety • Pennsylvania Ave mainline traffic operations • Transit operations inviting and efficient • Regional mobility 						
DISTINGUISH Create streets with vibrant places that reflect local character <ul style="list-style-type: none"> • Corridor experience • Place making – pedestrian experience • Place making – continuity and scale 						
CARE Increase community ownership and stewardship <ul style="list-style-type: none"> • Residential viability • Neighborhood circulation & connectivity • Local side street operations 						
BUILD Can be feasibly constructed at a reasonable cost <ul style="list-style-type: none"> • Right-of-way (how far beyond the existing footprint?) • Cost • Constructability • Construction impacts and duration 						



NANNIE HELEN BURROUGHS AVE PLAN



Bioswale

- Linear bioretention feature, may mimic natural stream channel form
- Reduces runoff volume as water is conveyed
- Removes stormwater pollutants: organics, sediment, metals
- Provides habitat and green space

Possible locations:

- Near Eastern Ave. DC Welcome Sign
- Between 48th and 49th streets



Bioretention Cell

- Small-scale shallow vegetated depression
- Reduces runoff volume
- Removes stormwater pollutants: organics, sediment, metals
- Provides habitat and green space

Possible locations:

Rain Gardens

- 50th to 51st Street, north sidewalk bulge area
- 50th to 51st Street, south sidewalk bulge area

Planters

- 48th Street, north & south bus stop bump outs
- 51st to Division, north side (6) & south side (3) sidewalk

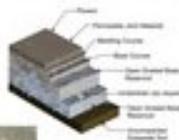


Permeable Pavement

- Reduces runoff volume
- Removes pollutants: sediment, oils and grease, metals
- Reduces urban heat island
- Aesthetic value: many color and pattern options
- ADA compliant pavement

Possible locations:

- North side of 46th to 48th
- Between 51st and Division Ave.



Vegetated Filter Strip

- Includes soil amendments and sustainable landscaping
- Reduces runoff volume
- Provides habitat and green space

Possible locations:

- 46th Street, Slope on the north side of NHB
- 50th to 51st Street, Median
- 51st Street to Division, Median
- Division to 55th Street, Median



Street Trees

- Reduces runoff volume
- Reduces urban heat island
- Improves air quality
- Reduces noise and wind effects
- Provides shade

Healthy tree pilot locations:

- (structural soil under permeable pavement)
- 51st St. to Division Ave.
- North side of 46th to 48th





**Anacostia Waterfront**
Transportation Architecture Design Standards



District of Columbia
District Department of Transportation

AWI Design Guidelines





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ENVIRONMENTAL LAWS & REGULATIONS

Federal

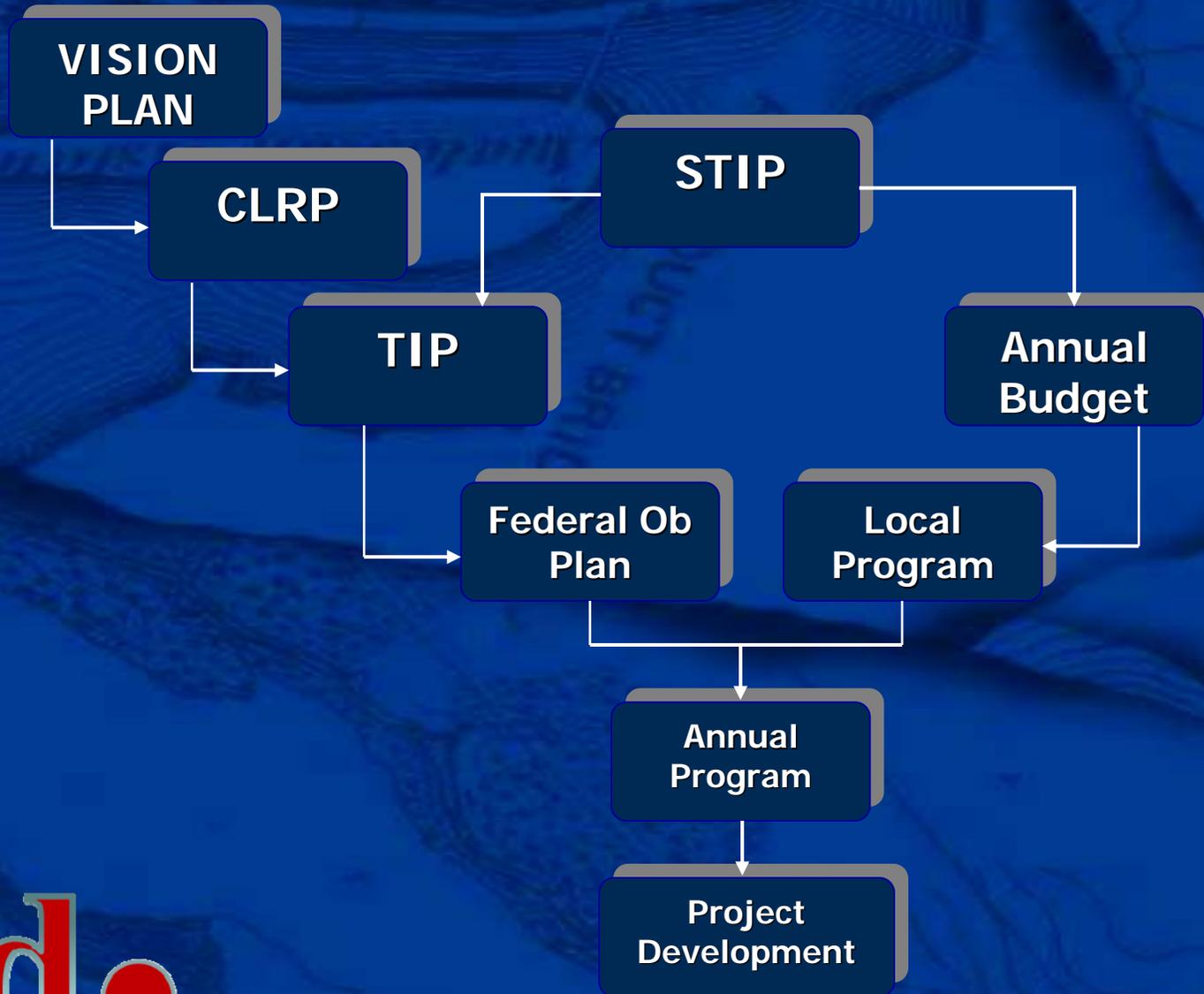
- National Environmental Policy Act (NEPA)
- NHPA, Section 106
- Section 4(f)
- Clean Air Act
- Clean Water Act (Section 404, 402, 401)
- EJ
- CERCLA, RCRA

Local

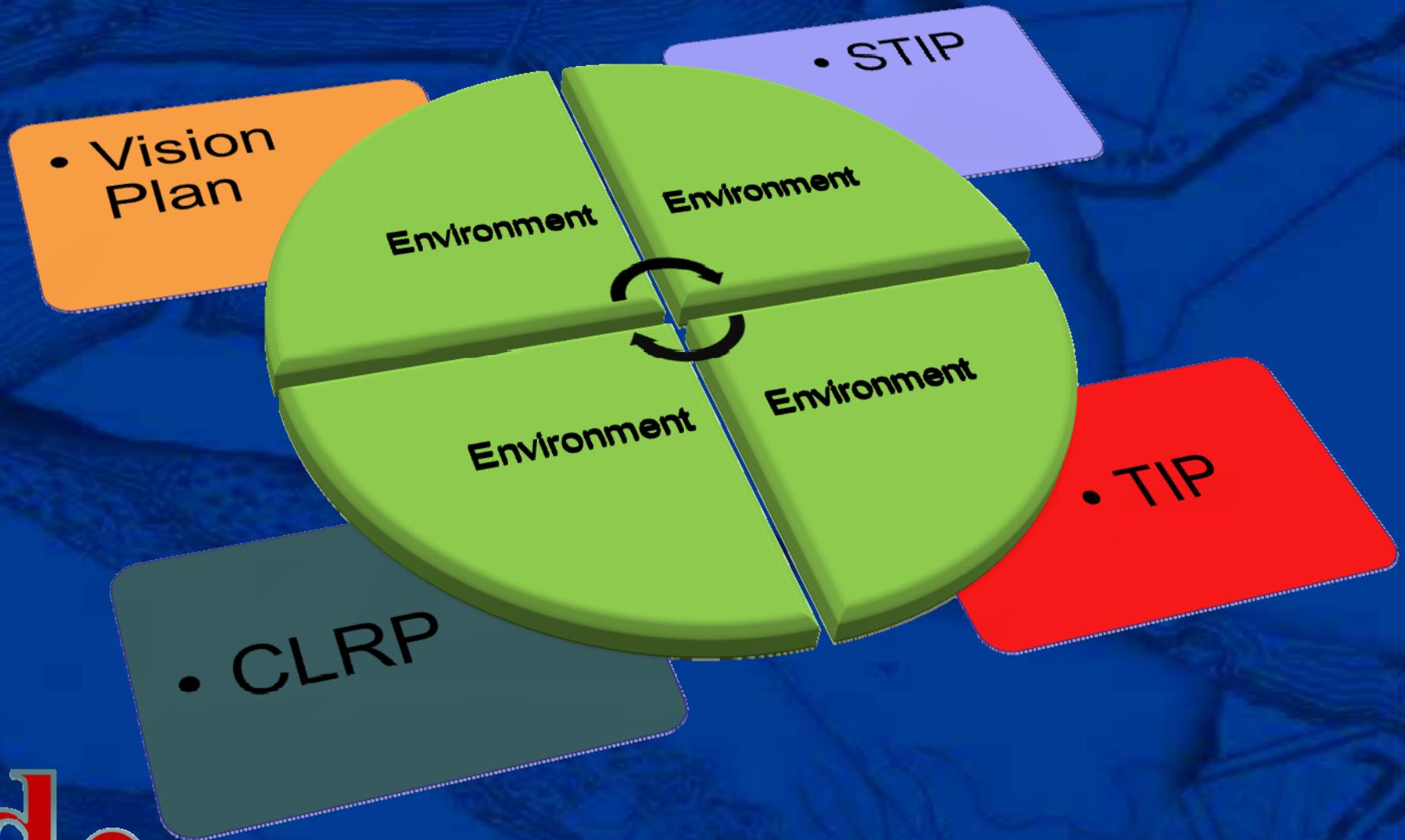
- DC Environmental Policy Act (DCEPA)
- DCMR Title 20, 21
- Other



Transportation Planning

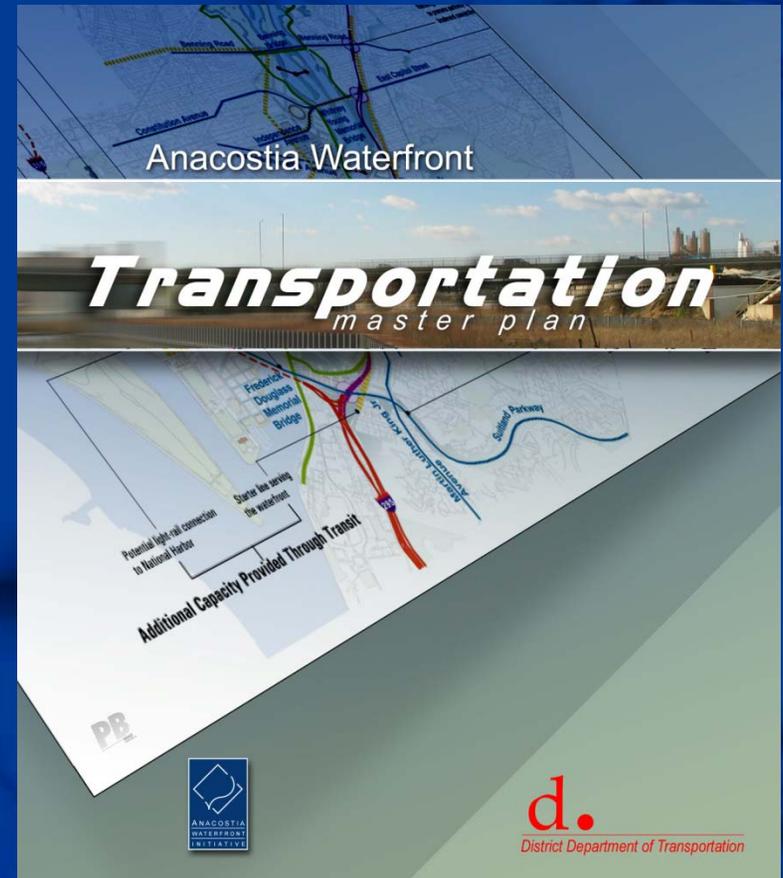


Linking Planning and Environment



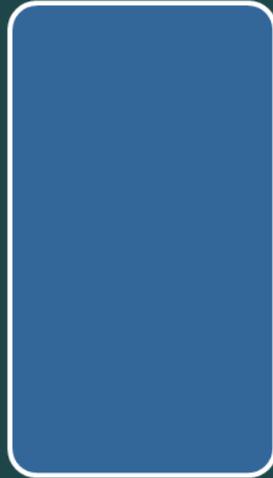
AWI MASTER PLAN

Reshape the area's transportation network into one that provides easy access for residents, commuters and visitors, and improves the area's environmental quality.





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Sustainability Plan







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**Management
Plans**



Management Plans

Washington, District of Columbia

Street Trees of the District

Sugar Maple Tree



back next

Urban Forestry Administration



Management Plans

DDOT CLIMATE CHANGE ACTION PLAN



DISTRICT OF COLUMBIA



DDOE Climate Change Action Plan



DDOT WORK IN SUSTAINABLE AREAS

- Research
- Landscaping
- Landscape Architecture
- Tree Maintenance
- Urban Forestry
- LED Technology
- Environmental Engineering
- Environmental Design
- Sustainable Design
- Water Quality
- Water Treatment
- Flood Plain Management
- Watershed Management
- Air Quality
- Recycled Material Development
- Recycled material
- Bike and Pedestrian Transport
- Alternative Fuels
- Diesel Retrofits
- Congestion Management
- Environmental Law and Compliance
- Mass Transit
- Environmental Policy
- Green Infrastructure
- Energy Efficient Products
- Renewable Energy



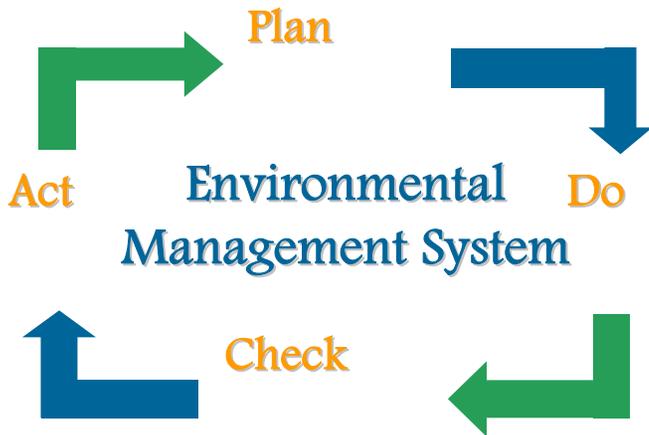
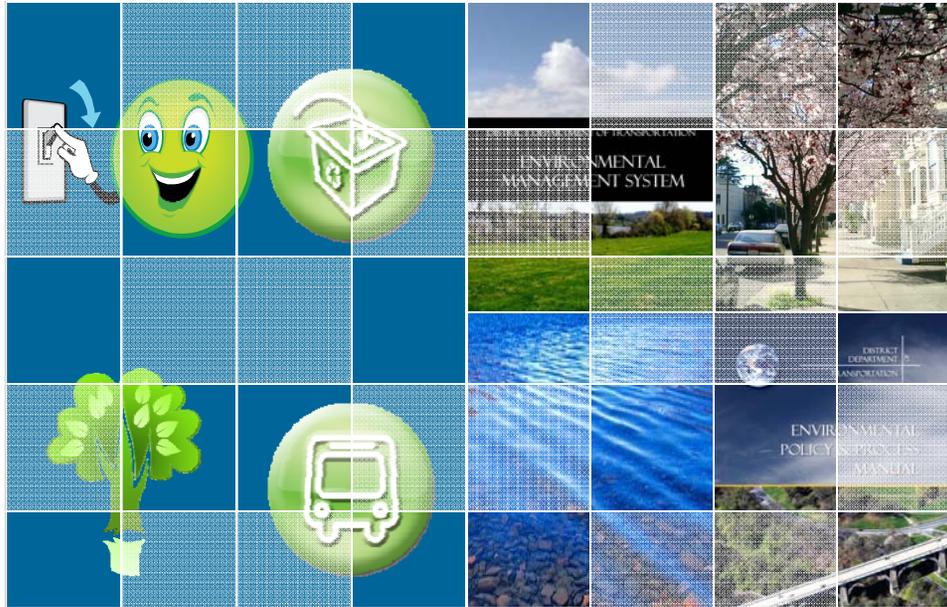


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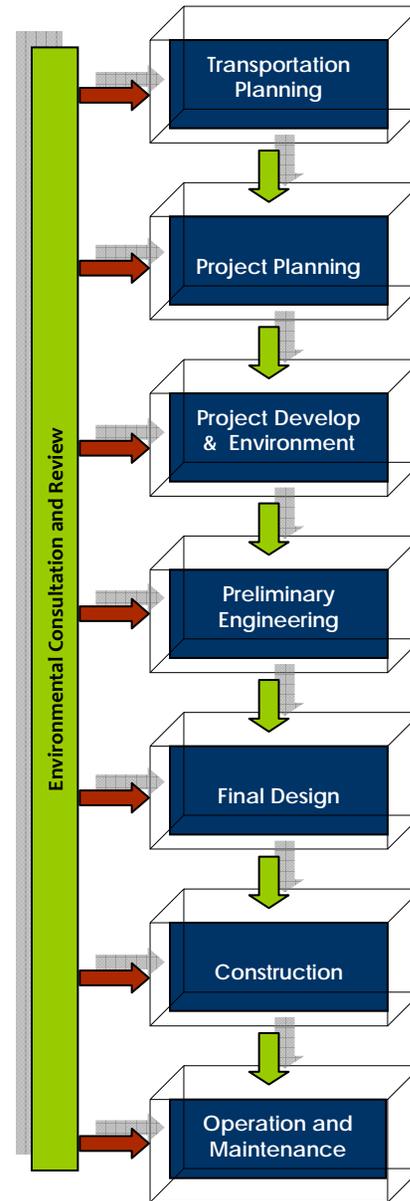


**Environmental
Management
System**

d.



<p>Save Energy</p> 	<ul style="list-style-type: none"> ▪ Turn off your light when leaving your desk or office at the end of the day. ▪ Turn off your light when leaving during the day for long period of time. ▪ Turn off the light when leaving a conference room. ▪ Enable the sleep mode on PCs, monitors, copiers, printers. ▪ Turn the unit and the monitor off at the end of the day.
<p>Conserve Resources</p> 	<ul style="list-style-type: none"> ▪ Use e-mail instead of printing if possible. ▪ Use black & white printers. ▪ Print/copy only the sections needed by each person. ▪ Use recycled content paper. ▪ Use double-sided pages. ▪ Use color only when needed and only for those pages needed. ▪ Instruct contractors to do the above when submitting documents.
<p>Recycle</p> 	<ul style="list-style-type: none"> ▪ Place bottles, cans, and paper in the recycle bins. ▪ Return printer and copier toner cartridges.
<p>Use alternative Modes of Travel</p> 	<ul style="list-style-type: none"> ▪ Use public transit or a bicycle when traveling for Work
<p>Use Environmentally Sustainable Products</p> 	<ul style="list-style-type: none"> ▪ Request/buy Energy Star Electronic Equipment ▪ Request/buy recycled content paper. ▪ Request/buy “green” products



Objective	Measure
Incorporate “green” features (i.e., commitments) in transportation projects	Measures include: <ul style="list-style-type: none"> • # of green street projects • # of green street components • % of project dollars spent on green features • Environmental benefits of features (e.g., lbs of pollutants removed, reduced fuel consumption)
Increase use of recycled materials in transportation projects	Quantity and type of material recovered and reused/recycled
Identify environmental requirements for new projects in a timely manner	% of Evaluation Form reviews and concurrences completed within 12 weeks of project review meeting
Avoid unnecessary rework due to unnecessary, foreseeable changes in documents and info submitted for review	Dollars spent in unnecessarily revising documents and submittals



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Greenhighways Partnership





Green highways Partnership

- Oregon Ave
 - Pennsylvania Ave, SE
 - Klingle Valley Trail
-
- DDOT was given 2009
GHP Award for
Sustainable Operations





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**Context
Sensitive
Solutions**

d.

Context sensitive

Public
Participation

Solutions

Environment



District Department of Transportation.

of Transportation

Safety and
Mobility

District Department

Engineering
Design

Key Elements of CSS

Purpose & Need

Environment

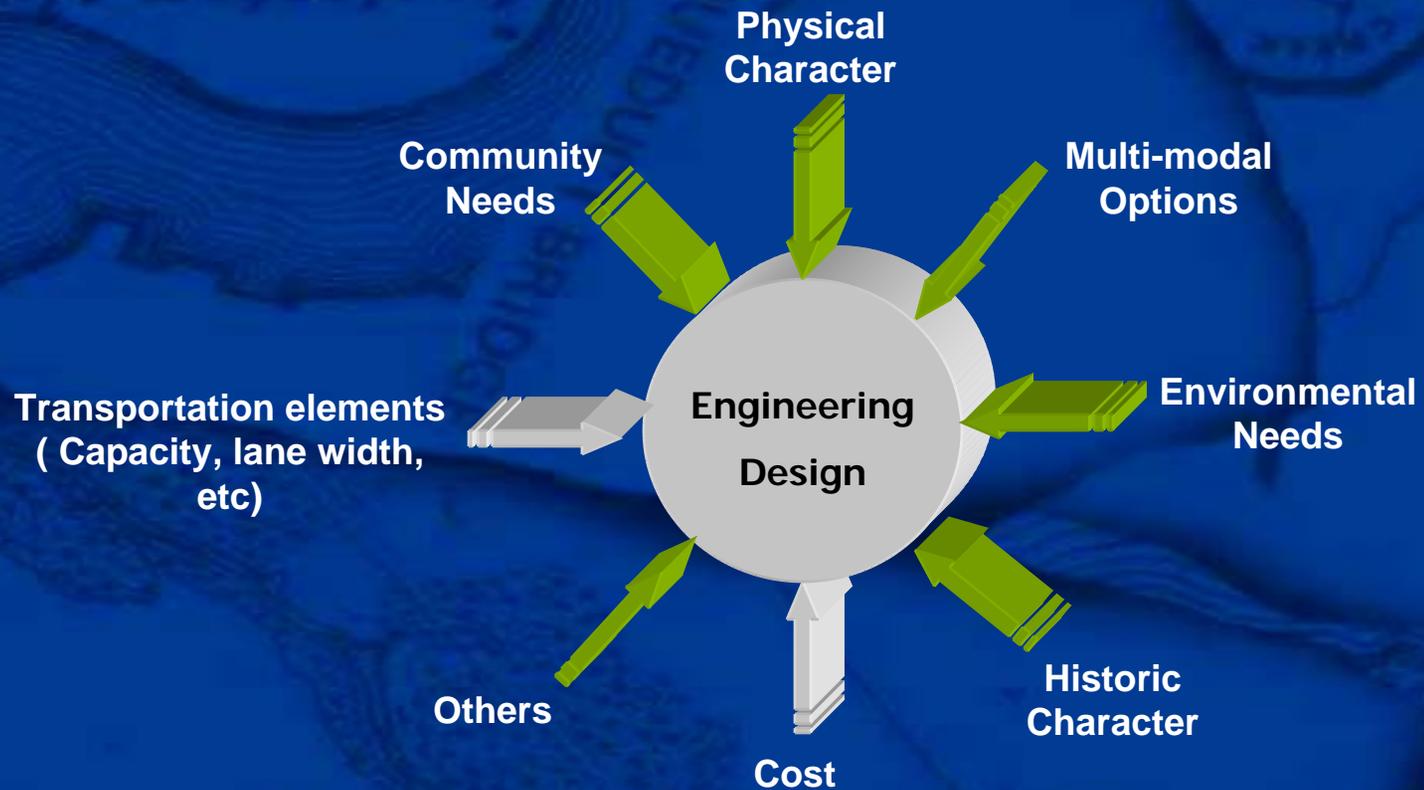
Public Participation

Engineering & Design

Safety & Mobility



CSS Design Challenge



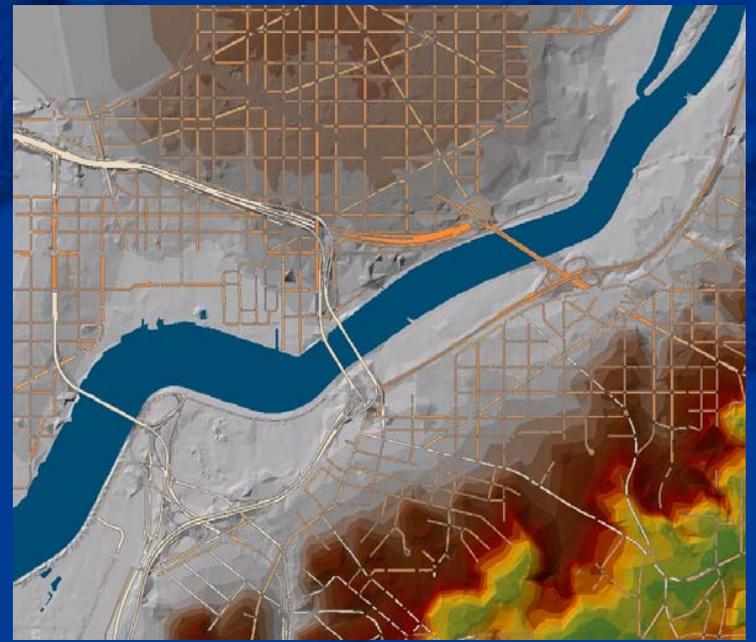
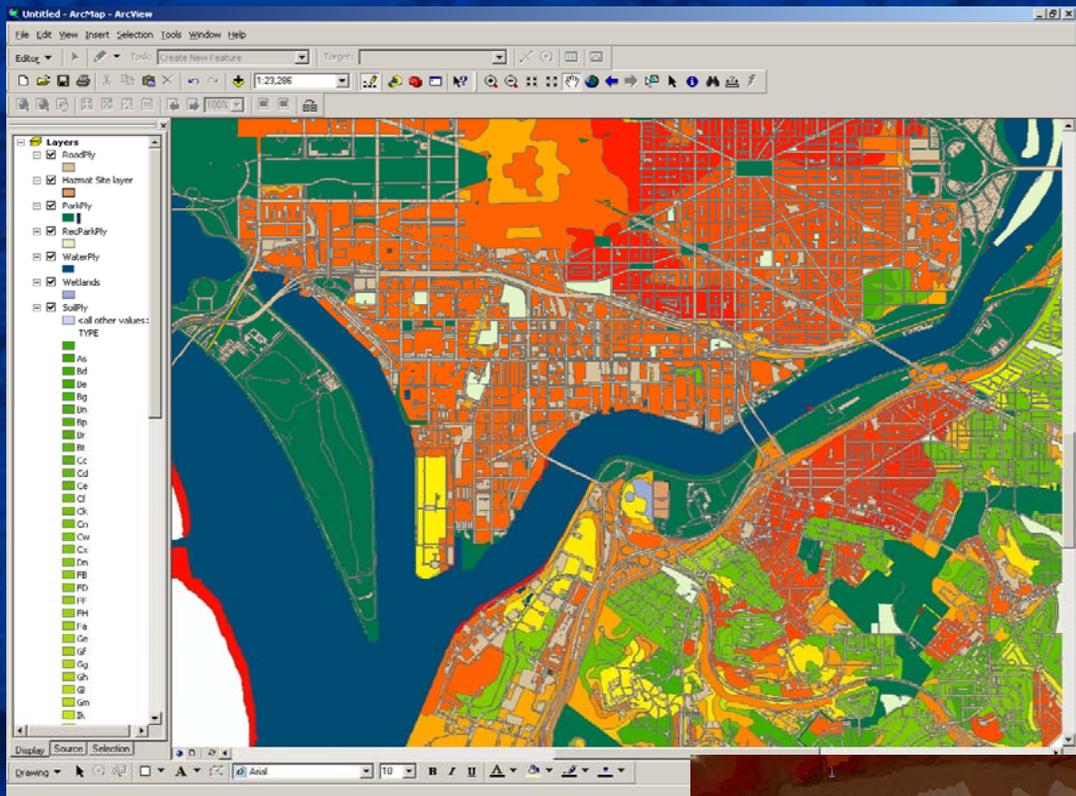


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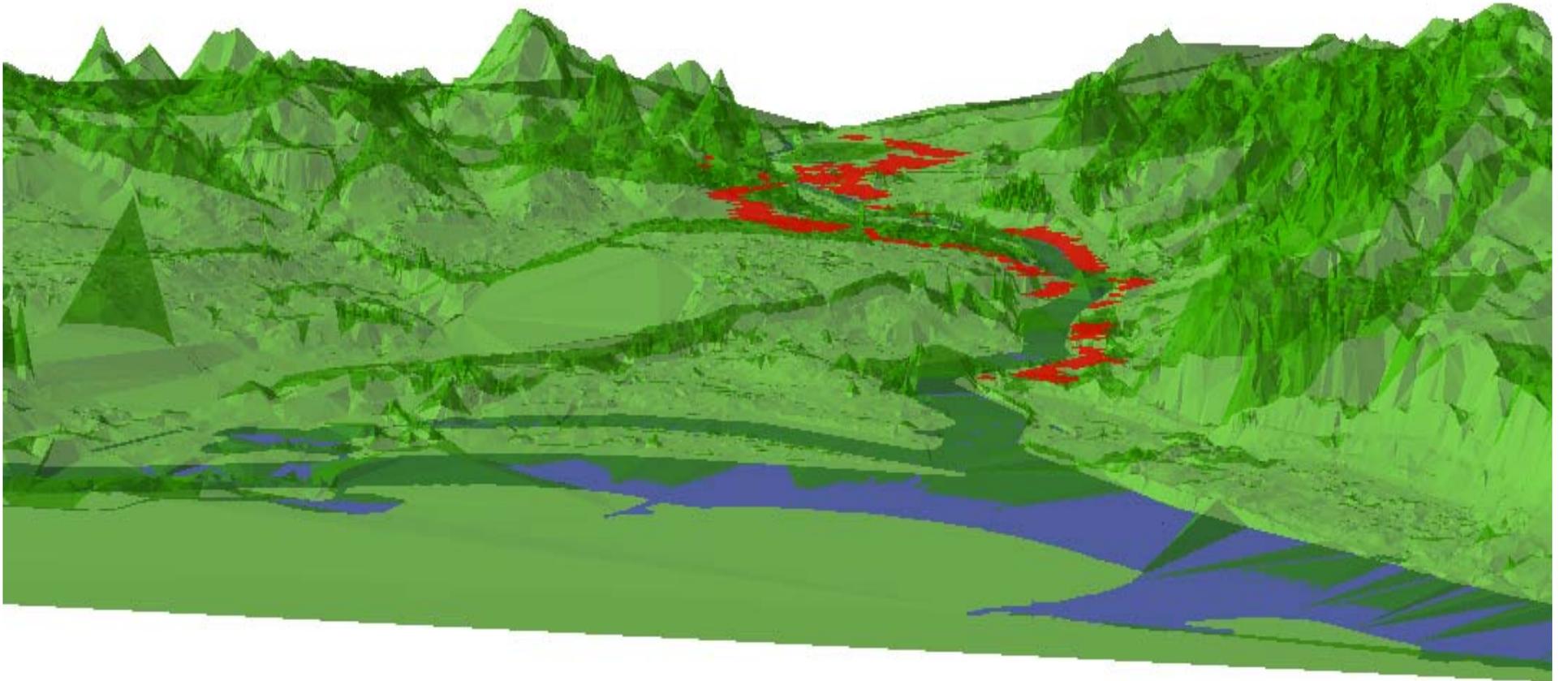


GIS & Geospatial Tools

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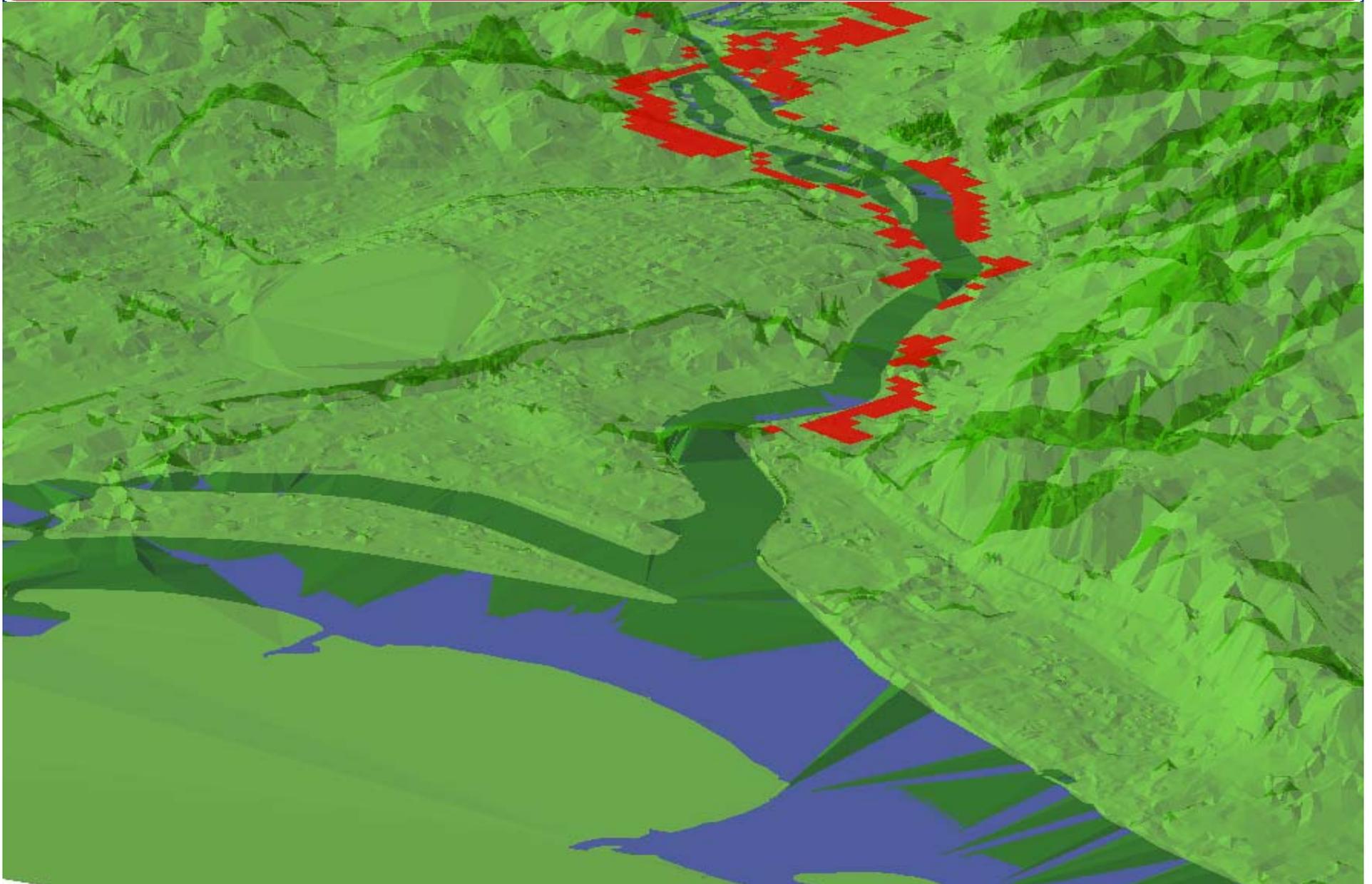
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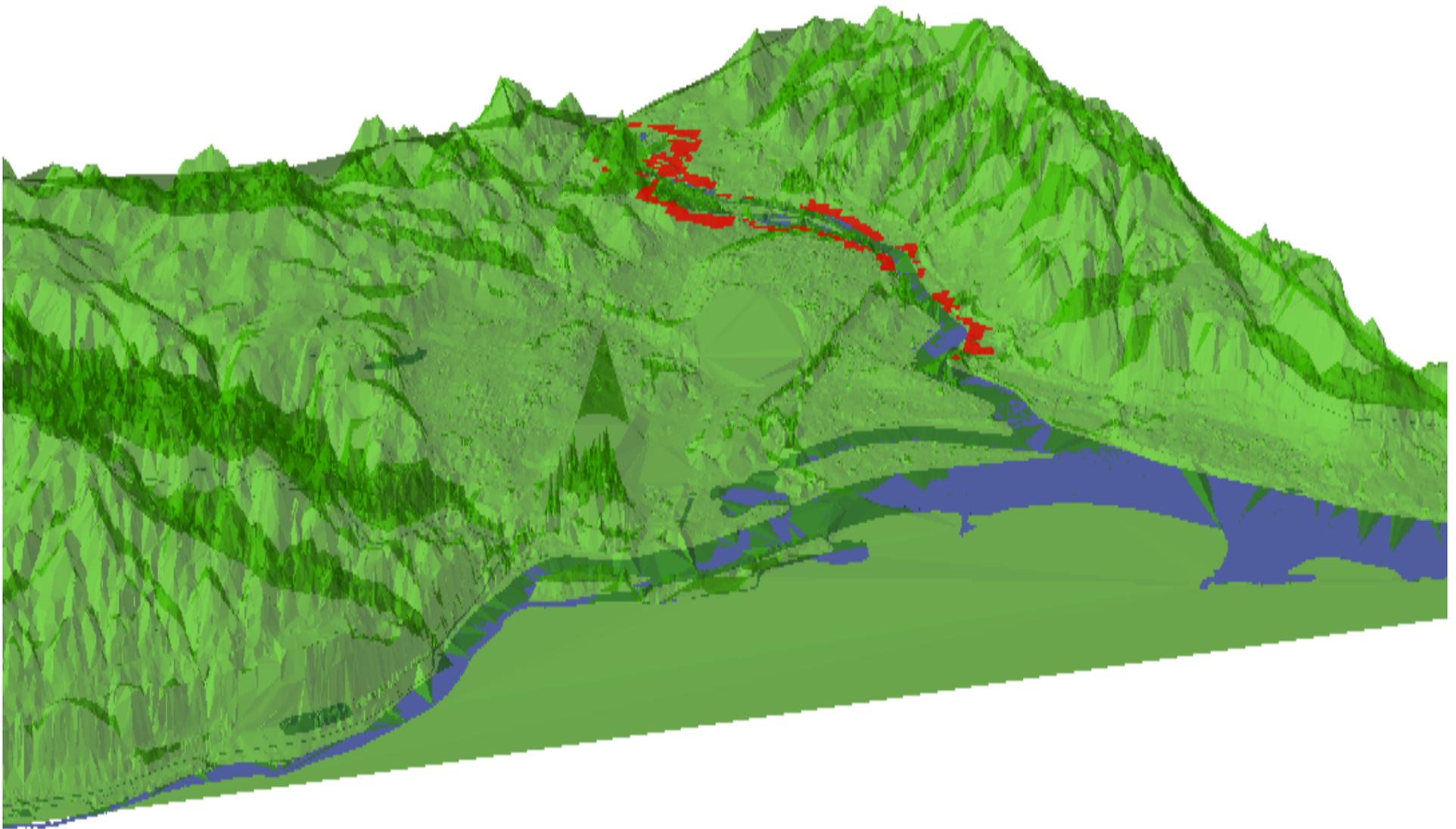
**Stormwater
& Watershed
approach**

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Stormwater & Watershed approach



Stormwater & Watershed approach





Challenges

Challenges

- **Conflicting priorities among agencies**
- **Geographic and jurisdictional boundaries**
- **Level of detail needed**
- **Communications**
- **Trust**
- **Risk aversion**
- **Interpretation of regulations**
- **Change**





QUESTIONS

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