

Planning a Disaster

Managing Disaster Debris within
the Jurisdiction



What a Disaster!

- Floods
- Windstorms
- Volcanoes
- Earthquakes
- Climate Change Impacts



We Don't Have Hurricanes...

- Why Plan
 - We legally have to plan
 - Our citizens want us to plan
 - The best disaster is a well rehearsed one



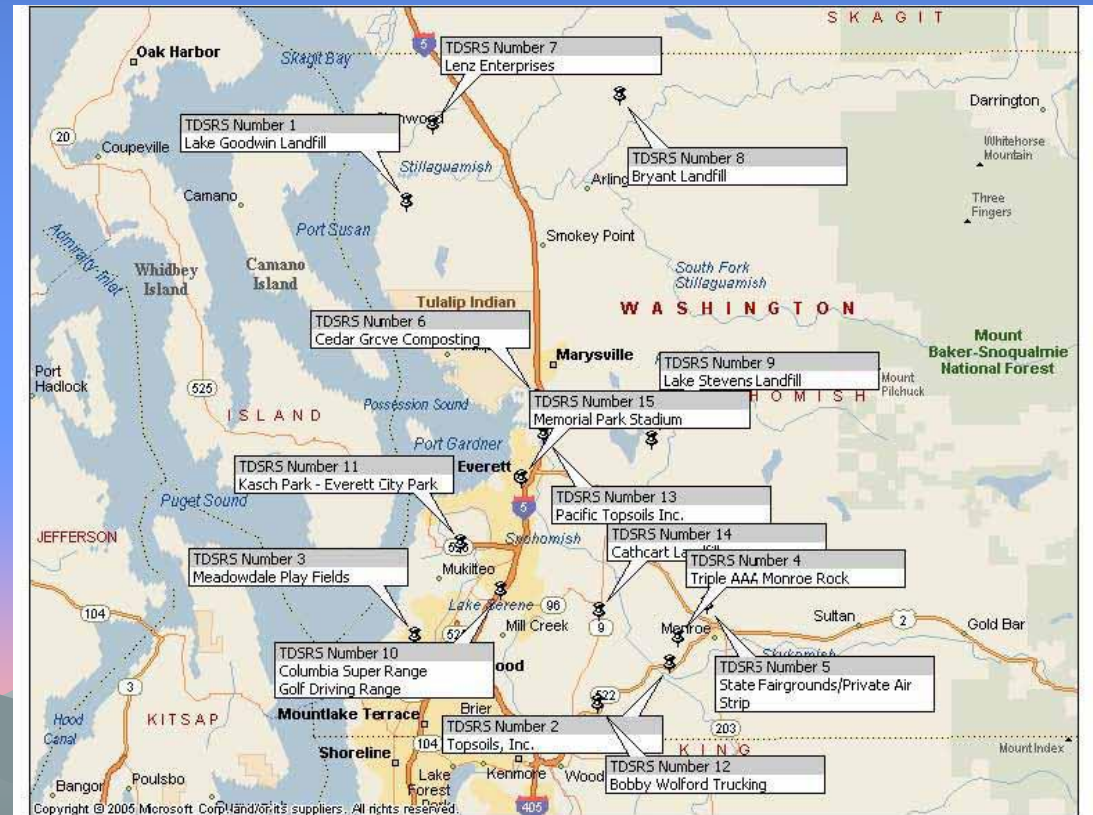
Where Do You Start?

- Solid Waste Divisions are NOT first responders
 - Our citizens want trash picked up
 - We need clear roads
 - We need a place to stash and sort the debris



Find Sites That Can Stage Debris

- 100 acres is nice, 10 acres works
- Divide planning area (County) into regions of 1,000,000 tons estimated debris
- ID as many sites as possible



Inventory Local Recyclers

- Sites with Tub Grinders
- Sites with concrete crushers
- Sites already permitted to burn hog fuel

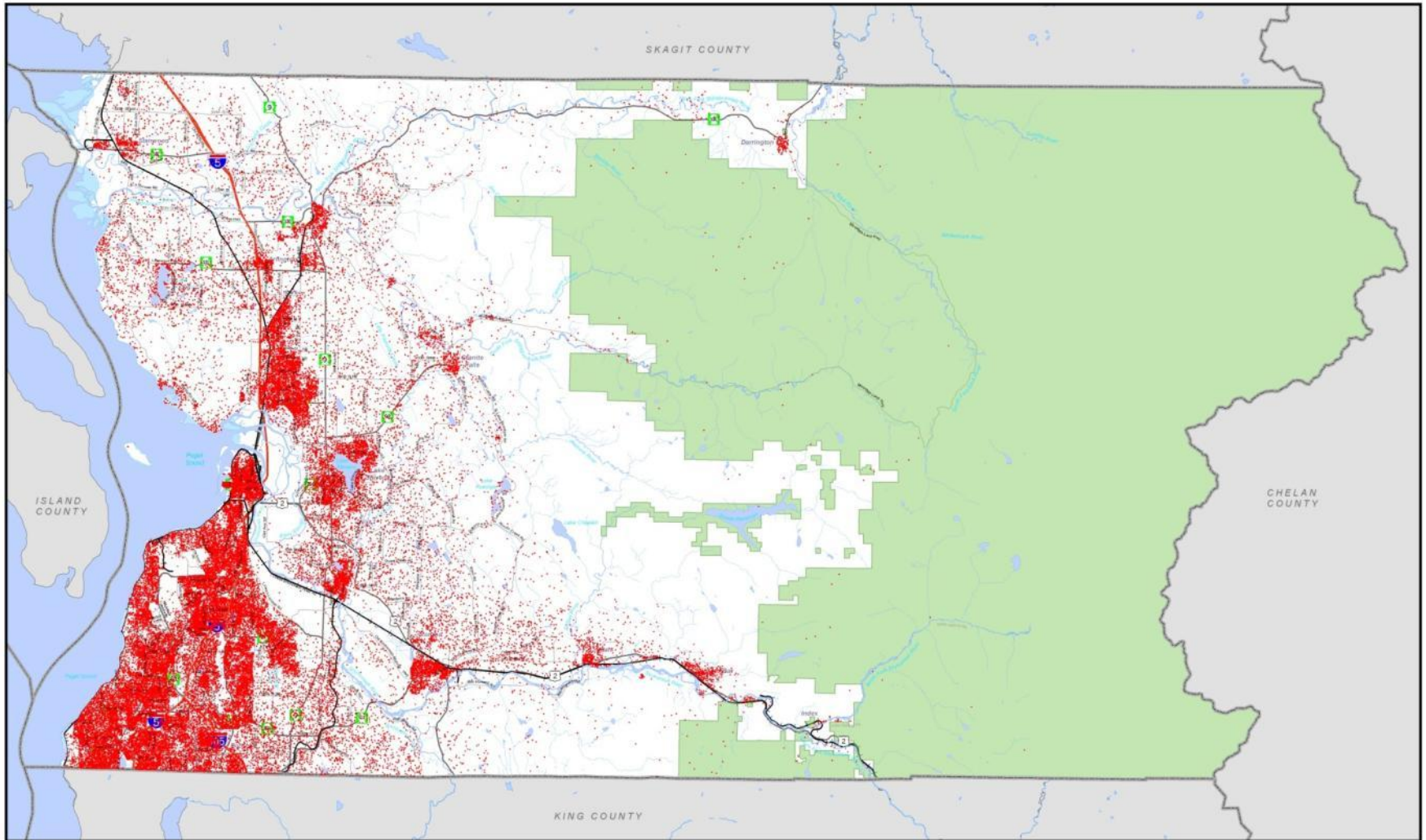


Inventory Local Recyclers

- Do they have certified scales
- Can they build a monitoring tower
- How much material can they process daily



Snohomish County Population Density - 2000 Census Data

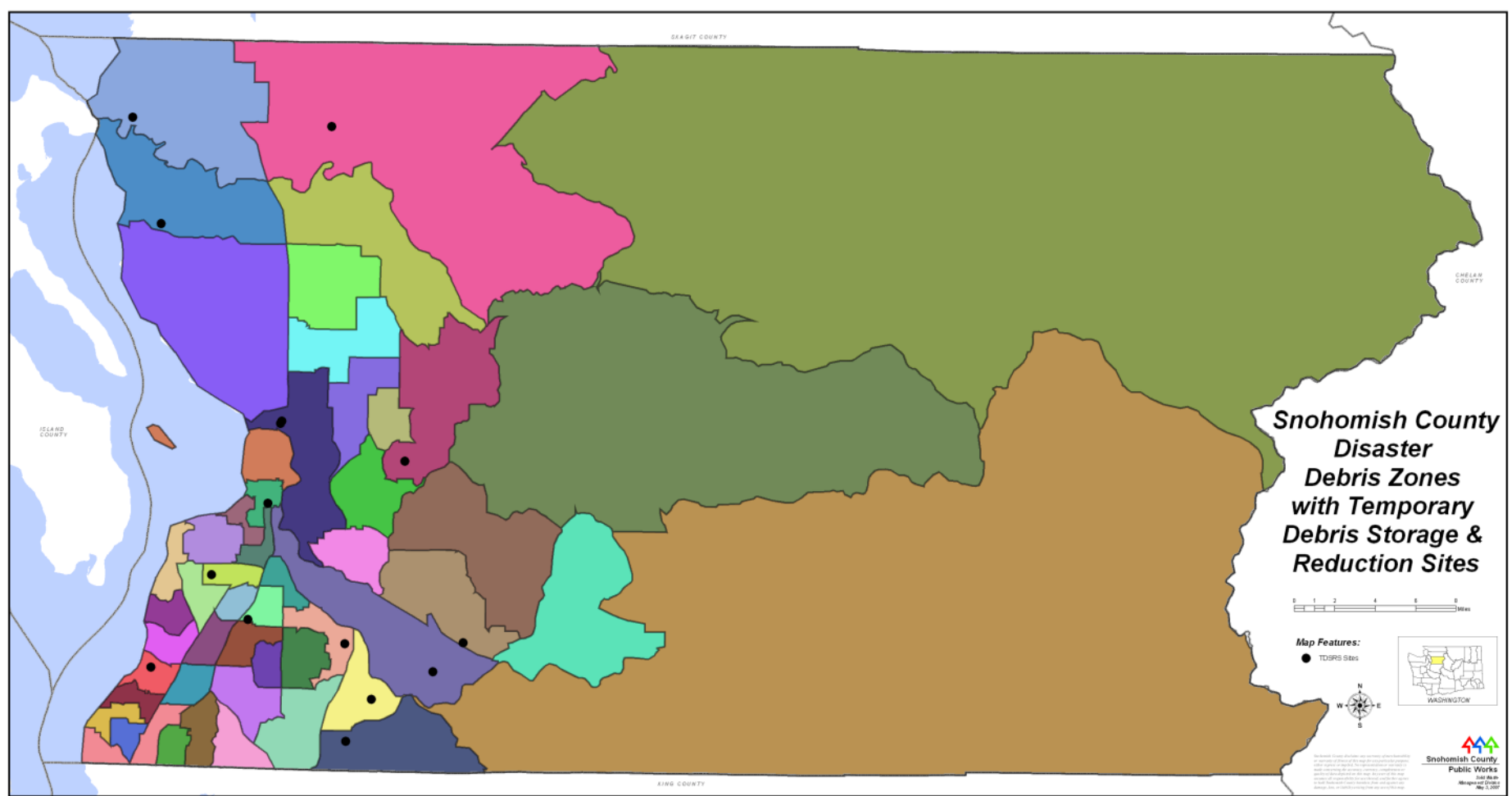


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- Railroads
- County Boundary
- National Forest
- 1 Dot = 10
- Total Population

1 Million Cubic Yard Debris Zones



Debris Forecast, Then What?

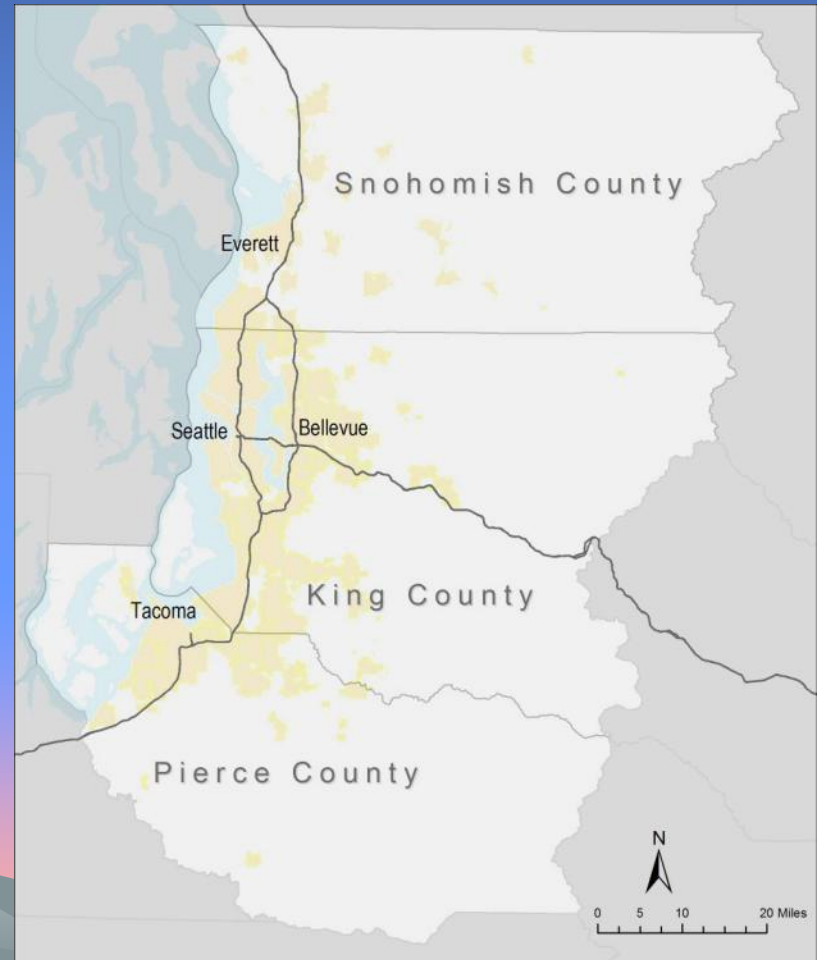
- Find more sites
- Write Agreements for use and cleanup
- Keep talking to parks
 - Site Cleanup is FEMA reimbursable
- Talk to Road Maintenance – which roads are first
 - Set nearby debris sites up first



Developing Regional Disaster Debris Management Plans

Seattle UASI Region-Washington State

- King, Pierce, and Snohomish Counties
 - Cities
 - Special Purpose Districts
 - Public and Private Organizations
 - Military Installations
 - Tribal Nations



Need for a Regional Plan

- Disaster Debris Disposal Requires Regional Cooperation
- Debris Creating Incidents Do Not Follow Political Boundaries
- Debris Impact on Landfills
- Evaluate Resources and Identify Gaps Prior to an Incident
- Shared Strategies for Debris Management and Public Information



Need for a Regional Plan

- Jurisdictions that Establish Debris Plans are Better Equipped to Maximize the Debris Reduced or Recycled, Decreasing Impact on Landfills
- Pre-Establishing Debris Management Sites (DMS) Reduces Social, Economic, and Environmental Impacts on the Community
- Evaluating Existing Resources Helps Identify Gaps Prior to an Incident
- Planning Disaster Debris Operations Helps With Possible Reimbursement Following a Federally Declared Disaster

Some Results from Regional Planning Process

- Checklist Developed to Review and Assess Plans: Developed From a Variety of Sources
 - FEMA Debris Management Public Assistance Pilot Program Plan Review Checklist
 - FEMA and U.S. Army Corps of Engineers Guidance and Best Practices
 - Regional Lessons Learned and Best Practices
- Completed Checklist Provides Comments and Resources so Jurisdiction can Update and Improve their Plan

Planning Results

- Participation From Over 75 Stakeholders Throughout Regional Planning Process
- Developed UASI Disaster Debris Management Plan
 - 120 pages with 14 appendixes
 - Defined roles, responsibilities, expectations and priorities for the Urban Area
- Developed an Outline for the Operational Disaster Debris Management Plan Template and local plans established
- Regional Disaster Debris Management Team and Sustainment Model Established
 - Biannual meetings to discuss issues and Plan changes

Volunteers are Amazing!



Resources

- www.FEMA.gov
- State of Washington
Emergency
Management Division
www.emd.wa.gov/
- US Army Corps of
Engineers
<http://www.nws.usace.army.mil/>
- [ftp://ftp.snoco.org/public
works/solid_waste](ftp://ftp.snoco.org/public_works/solid_waste)

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Templates can be found at
<http://www.kingcounty.gov/debrisplan>