

Ecoroofs & Other Green City Strategies in Portland, Oregon

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Reduce Runoff, Filter Air, Cool the
City, Provide Wildlife Habitat



Green City Strategies

- Cover suitable rooftops on new and existing buildings with soil and vegetation: Ecoroofs, Roof-gardens
- Remove un-necessary pavement and excavate areas to allow stormwater runoff to enter and plant vegetation: Rain-gardens.
- Plant trees.
- Daylight Creeks and restore natural areas.

City of Portland ~ 1800



Portland today

20 sq. miles rooftops

45 sq. miles pavement

Portland Tomorrow

35+ sq. miles rooftops

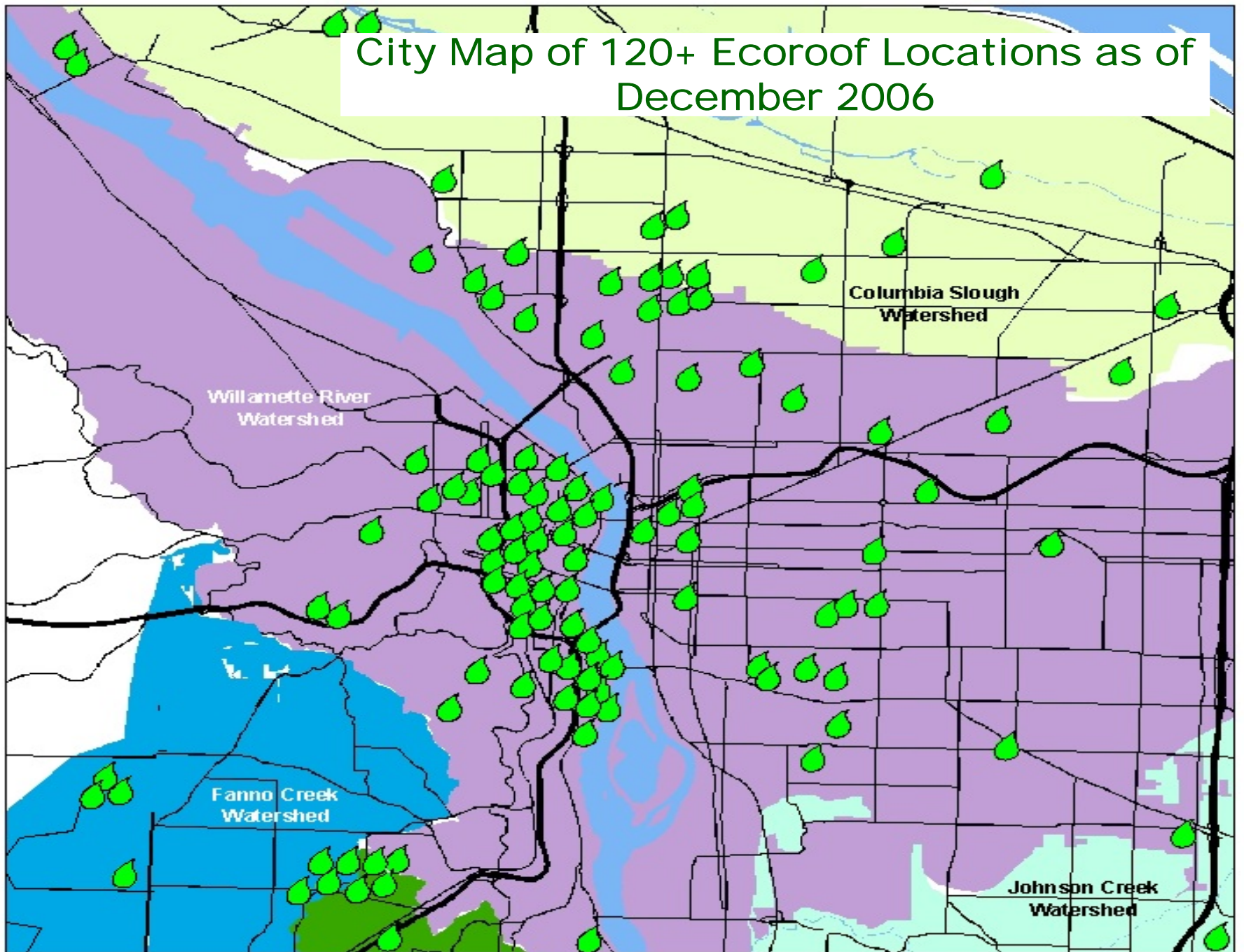
?? sq. miles pavement

Total land/water area 140 sq. miles

Portland Policies and Incentives that Support Ecoroof Installations

1. City Public Works Code 17.38: Stormwater Management 1999.
2. City Zoning Code 33.510 FAR Bonus: Ecoroofs added in spring 2001;
3. City Resolution passed in 2005 requires all city owned buildings to install Ecoroofs when re-roofing or on new buildings;
4. BES - Watershed Stewardship Grants have funded 8 Ecoroofs;
5. OSD - Green Investment Grant have funded 9 Ecoroofs;
6. BES distributes EPA Grant money for demo projects; \$40,000 for ecoroof.
7. BES has contributed \$275,000 for ecoroof demo projects 1999-present.
8. Clean River Reward – Ecoroofs potentially qualify for full reward;
9. BES and Office of Sustainable Development provide technical assistance. Planning Bureau staff also provide some assistance.
10. BES, PSU, Metro and Multnomah Co. are monitoring Ecoroof performance.

City Map of 120+ Ecoroof Locations as of December 2006



Portland – Zoning Floor Area Ratio Bonus for Ecoroofs

“Twelve ecoroofs help boost economic development: 260,000 sf installed since 2001 have generated almost 600,000 sf downtown development, estimated market value of \$250,000,000.00”

Over 130 ecoroofs installed in Portland since 1996. Interest continues to grow and

Louisa Apartments - Ecoroofs, FAR Bonus & Stormwater Management



Multnomah Co. Building before Ecoroof



Multnomah Co. Building with Ecoroof



Cathedral Place Ecoroof – retrofit on existing roof membrane



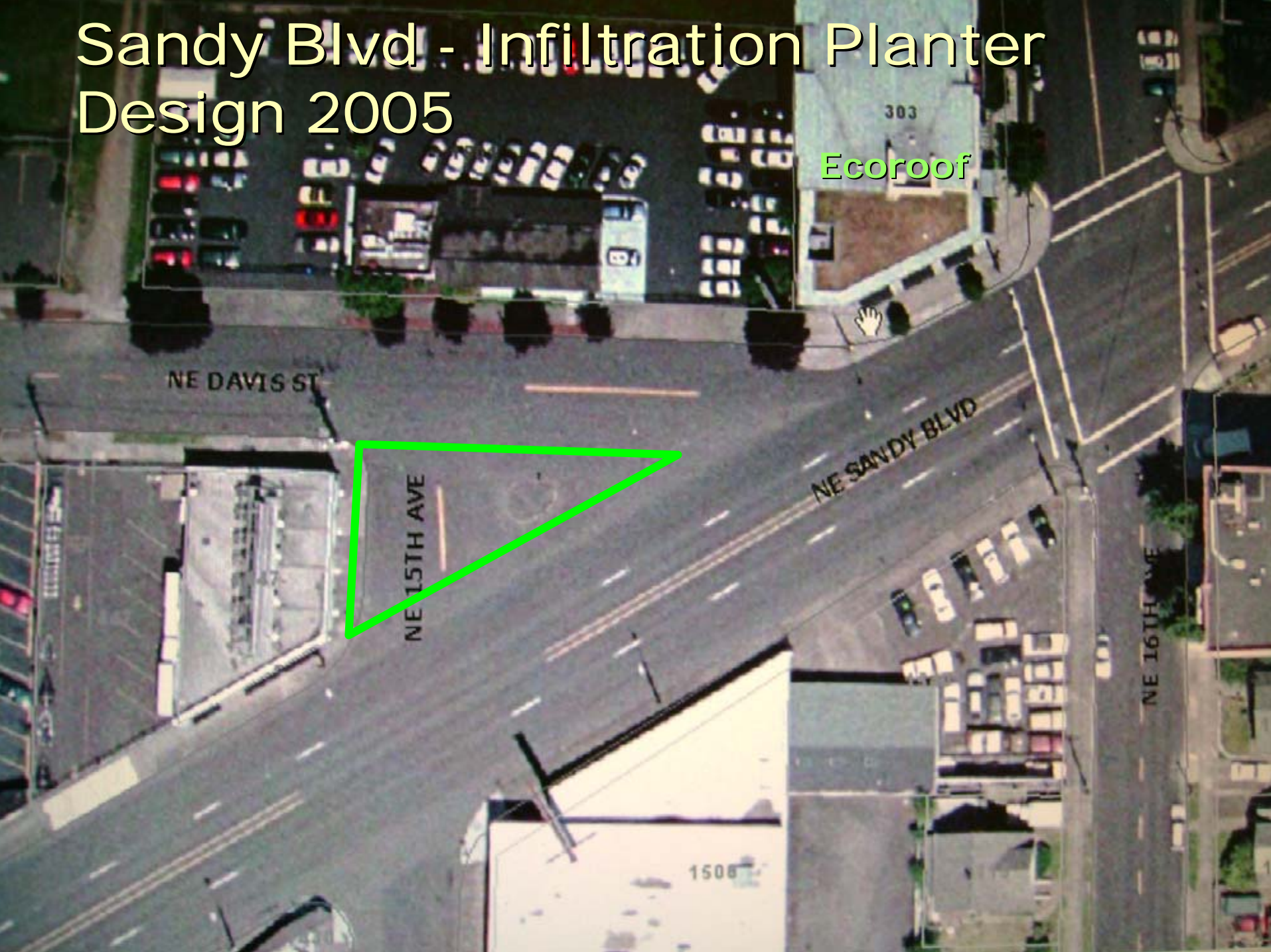
Portland Building – Ecoroof Design



Portland Building Ecoroof – 15th floor Westside - February 2007



Sandy Blvd - Infiltration Planter Design 2005



Ecoroof

NE DAVIS ST

NE 15TH AVE

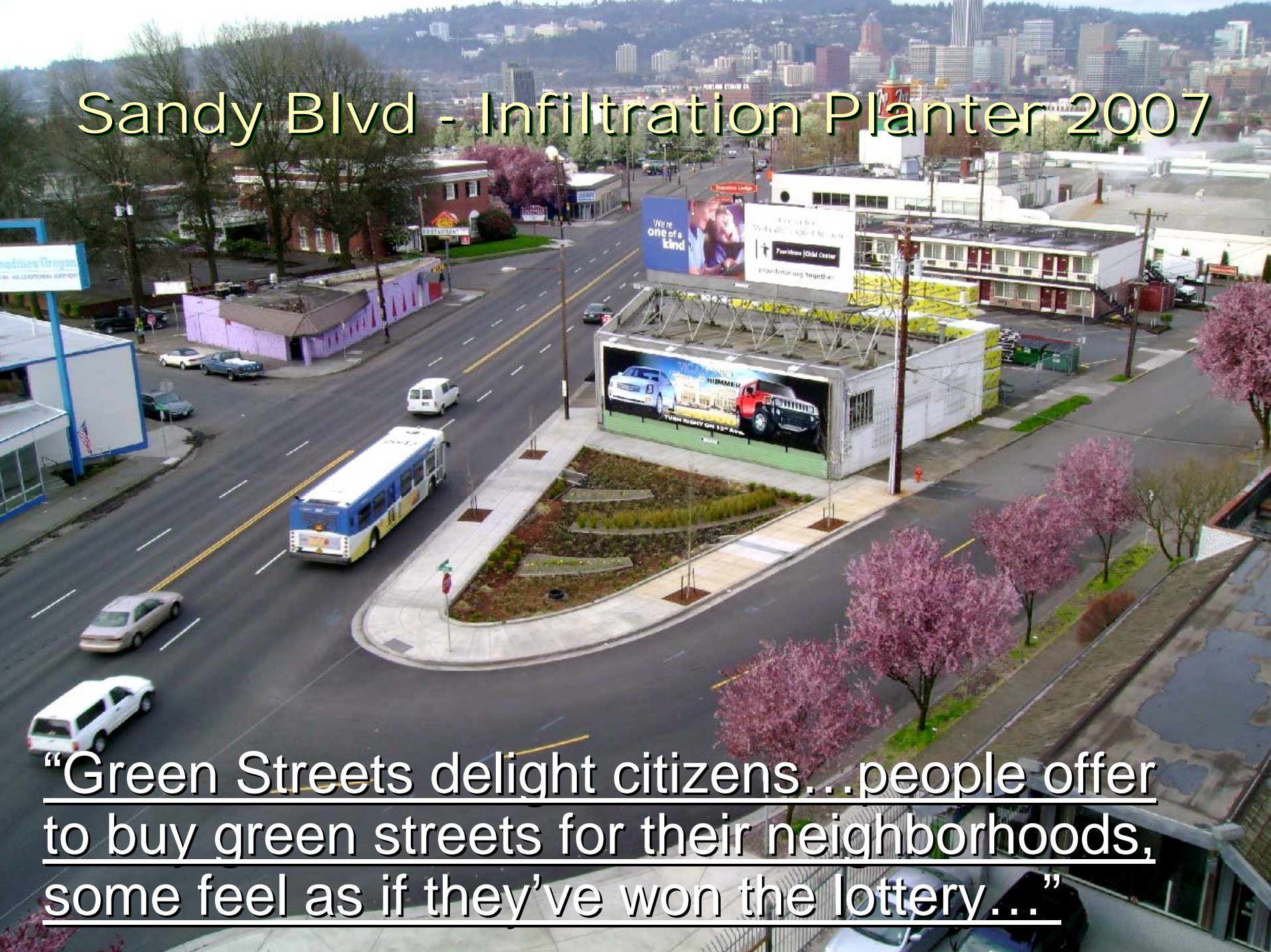
NE SANDY BLVD

NE 16TH AVE

303

1500

Sandy Blvd - Infiltration Planter 2007



“Green Streets delight citizens...people offer to buy green streets for their neighborhoods, some feel as if they’ve won the lottery...”



“Schools staff and kids love those rain-gardens, they manage stormwater, save money, and cool the building”

Tabor School before rain-garden

"Our classroom is cool now...as in temperature since the rain-garden was installed."

Tabor School Rain-garden

