

GREENSPACES RESTORATION PROJECT

CITY OF TROUTDALE

STRAWBERRY MEADOWS

Contract # 920271

Funding year 1998

Completed in November, 1999

FINAL REPORT

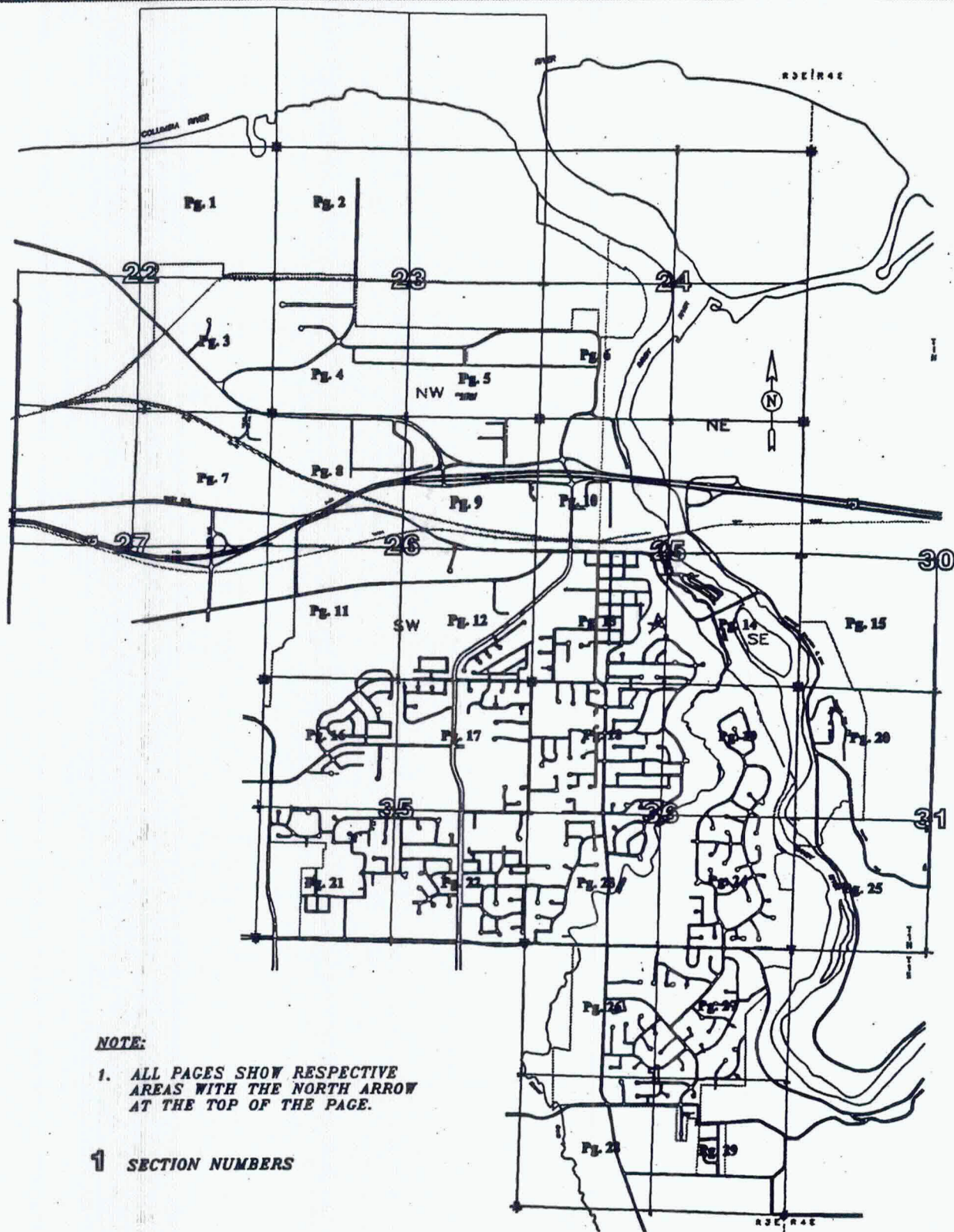
3-23-00

PROJECT AREA

&

PROJECT SITE

MAPS & PHOTOS



NOTE:

1. ALL PAGES SHOW RESPECTIVE AREAS WITH THE NORTH ARROW AT THE TOP OF THE PAGE.

1 SECTION NUMBERS

★ **Project Site**
STRAWBERRY MEADOWS

FILE NAME: TROUTBAS
TITLE BLOCK: TBBX11
EXTERNAL REFERENCES: NONE
PLOT DATE: 11-24-98
BY: W.H.
PREVIOUS REVISION DATE:



DEPARTMENT OF PUBLIC WORKS
CITY OF TROUTDALE
MASTER
GRAPHICAL INDEX
MULTNOMAH COUNTY, OREGON
NOVEMBER 1998

STRAWBERRY MEADOWS

BEFORE
HIMALAYAN BLACKBERRY VINES

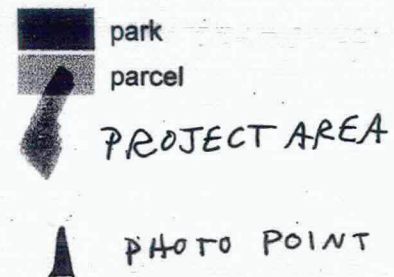
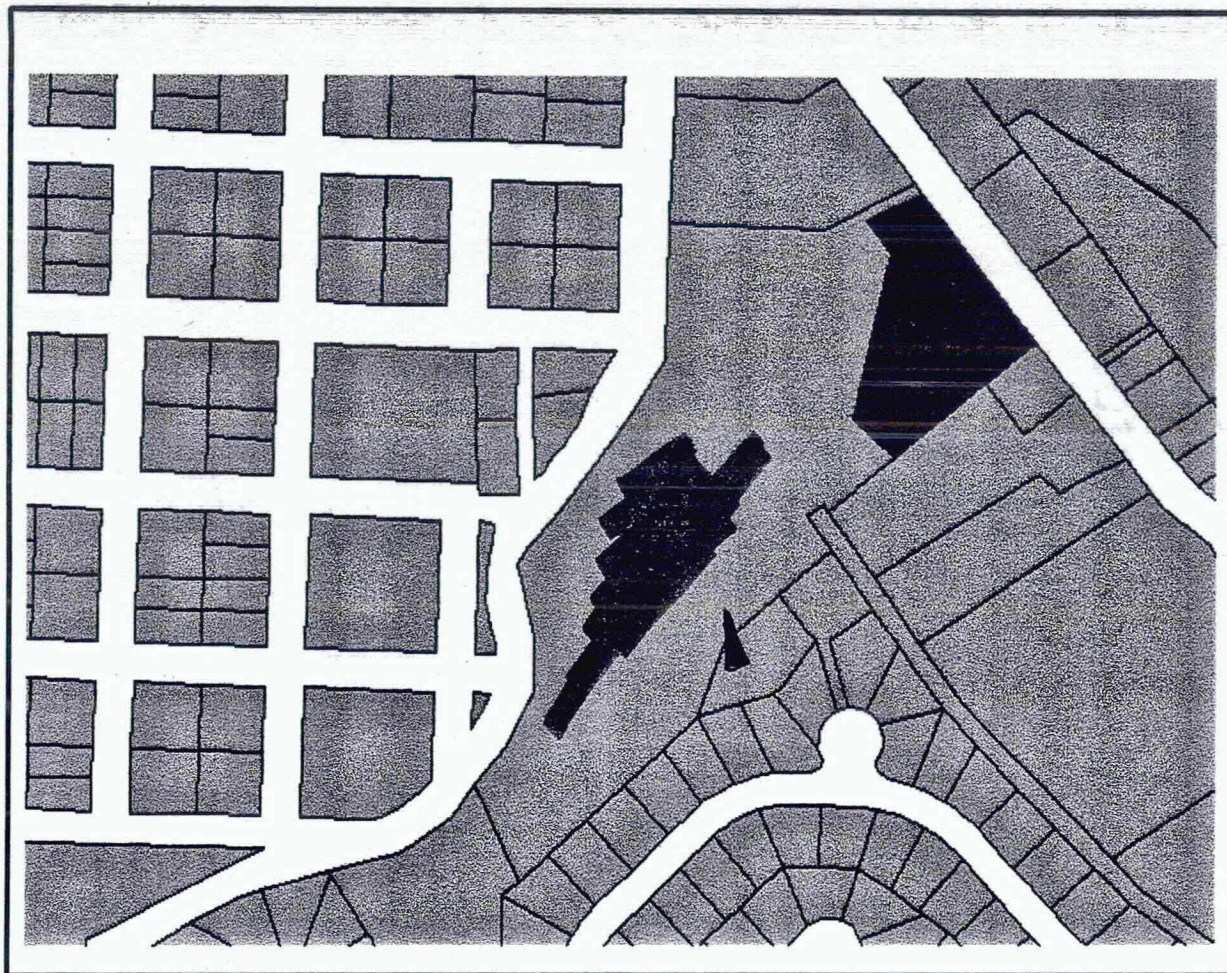
TROUTDALE GRADE
SCHOOL CLASS -
RECEIVE PROJECT
DESCRIPTION + MONITORING
TIPS



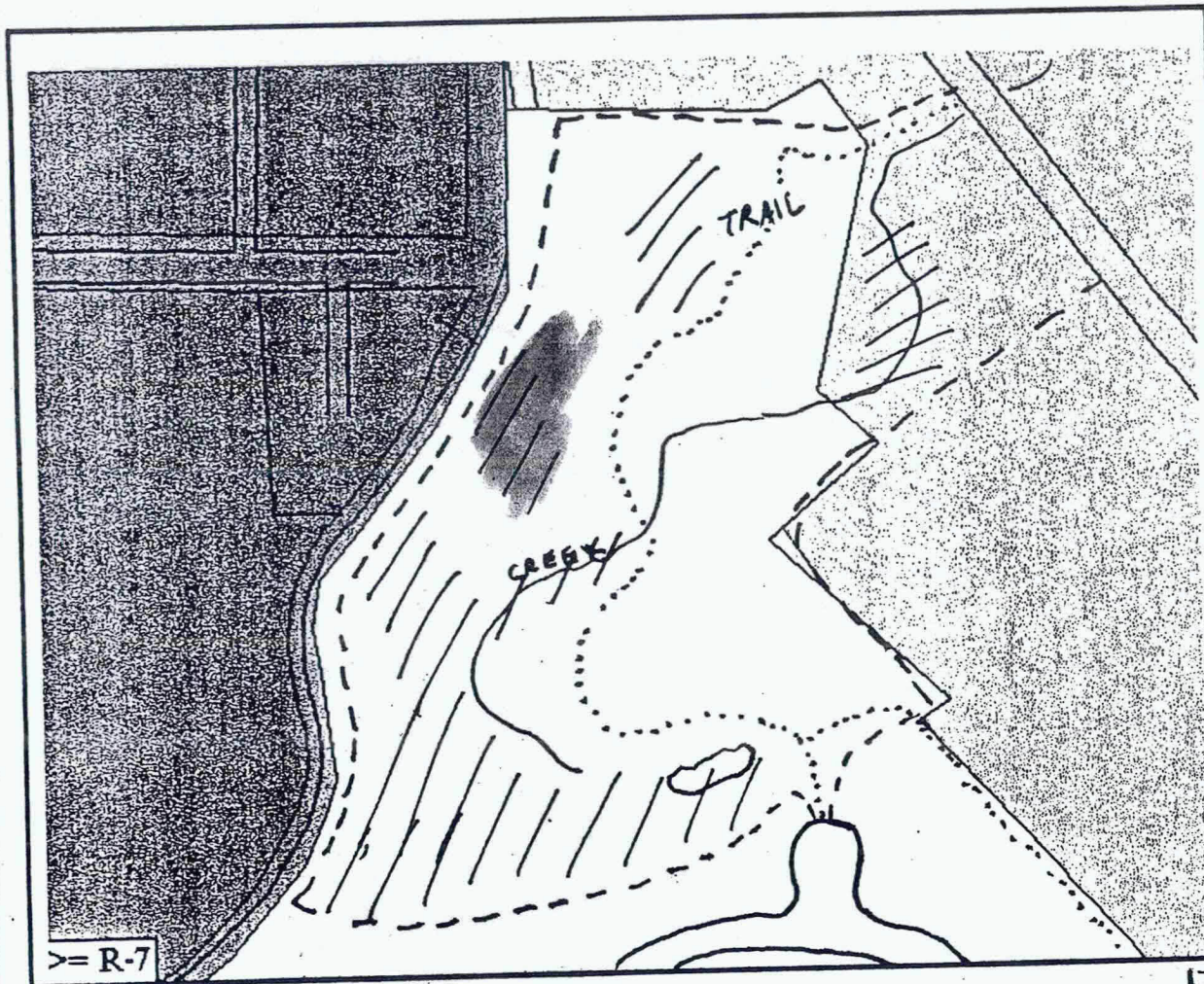
AFTER - BERRY VINES CLEARED



Strawberry Meadows Greenway



STRAWBERRY MEADOWS GREENWAY PLANTING PLAN



streets (LAYER)

- BDCTY
- RD
- RDBR
- RR
- RRBR
- SUBD
- SUNAM
- SVSEC
- SWRIV
- X-NARROW

zone (ZONECODE)

- A-2
- CBD
- CC
- GC
- GI
- 184 ROW
- IP
- LI
- NC
- O
- R-10
- R-20
- R-4
- R-5
- R-7

AREAS THAT
HAD EXOTIC
WEEDS
REMOVED AND
REPLANTED
WITH NATIVE
PLANTS
MYC
CRUE

PROJECT DESCRIPTION

The Strawberry Meadows Project identified a steep canyon for restoration. A small year-round and spring-fed creek flows down the canyon, through a wetland, under the Historic Columbia River Highway and into Beaver Creek. New subdivision development introduced storm-water flows into the creek. The storm-water flows increased the volume, duration and velocity of in stream flow. The fragile soils began eroding. Originally, the project planned to address erosion and re-vegetation.

The project was delayed due to major storm damage and extreme erosion that occurred after the project application. The Public Works Department determined that a large scope storm-water restoration project was needed in the steep canyon and named their project 'Harlow Canyon Restoration.' Our comparatively small project became a lower priority and deferred to the Public Works project.

The Public Works project was designed by professional engineers but did not receive permit approval from DSL in time to be implemented during the 1998 summer season. The year round creek tributary feeding into Beaver Creek required in-stream work to occur during July or August. The lack of permit approval set back both projects for a year. An extension was requested and granted for the Strawberry Meadows project.

Once the Harlow Canyon Project received permits, that project proceeded. It impacted the stream and most of the canyon area. That project was contracted out for \$277,135.00 and work began in July 1999 and completed in early September 1999.

The Strawberry Meadows project was altered to address a steep slope located west of and uphill from the Harlow Canyon project. Each project covered separate areas. Plant materials were ordered in July 1999. Labor was not available until the Multnomah Youth Conservative (MYC) and Crew Restoring the Urban Environment (CRUE) activated their programs with the school year. Another extension was granted due to the timing of labor availability.

During October and November, MYC and CRUE each cleared a section of Himalayan Blackberry vines from the extremely steep slope. Once cleared, native plants were delivered from the nursery and planted by MYC and CRUE. Planting was completed by the end of November 1999.

Troutdale Grade School's fifth grade class, taught by Barbara Morita, committed to monitoring the project. Their school is within easy walking distance to the project site. The project manager met with the class on site to explain the projects. The students will record observations of plants, animals and birds. Erosion will be reported too.

GOALS AND BENEFITS

The original project goals addressing the stream erosion were altered to address the slopes uphill from the stream. Removing exotic and invasive Himalayan Blackberry vines became the main focus for the Strawberry Meadows project. Replanting native plants is required after berry vine removal as the vines shade out most other plants. Restoring a native plant community beyond the scope of Public Work's Harlow Canyon project demonstrated contrasting approaches to erosion control and plant restoration.

Benefits from blackberry vine removal include increased diversity in the native plant community and corresponding increases in native bird and animal life. Removing blackberry vines increases slope stability and reduces erosion. Reduced erosion contributes to improved water quality.

Educational benefits resulted with the involvement of MYC, CRUE and the Troutdale grade school class. Each of the participants learned about native plant communities and restoration methods.

WORK TASKS AND TIMELINES

| | |
|--------------------------|---|
| November 3, 1997 | Grant Awarded |
| December 1997 | Winter storms create additional erosion. |
| February 1998 | Public Works decision to do a storm-water Project at same site. |
| March-April 1998 | Public Works consultant design, engineering & permit application. |
| May 1998 | Permit from DSL denied. Project postponed. |
| April 1999 | Extension requested. Coordinate plans and permit approval with Public Works and Fish and Wildlife. |
| June 1999 | Extension and permits granted. Plant list selected. Labor sources sought for July & August. |
| July & August 1999 | Plants ordered. No labor sources found for July and August. Public Works project underway. |
| September 1999 | A second extension requested and approved based on labor availability dates. |
| October & November 1999 | MYC and CRUE crews clear berry vines and plant native plants. Troutdale Grade School begins monitoring visits. Public Works project planting completed too. |
| December 1999-March 2000 | Monitoring for erosion and final report preparation. Documentation for reimbursement gathered. |

PROJECT BUDGET

| <i>Item</i> | <i>Cost</i> | <i>METRO grant</i> |
|-----------------|-------------------|--------------------|
| Native plants | \$1,723.75 | 200.00 |
| CRUE labor | 900.00 | 900.00 |
| MYC labor | 1,050.00 | 1,050.00 |
| Project Manager | 652.00 | |
| TOTALS | \$4,325.75 | \$2,150.00 |

PROJECT STAFF/WORKERS/VOLUNTEERS

Valerie Lantz, Parks and Facilities Superintendent

Multnomah Youth Conservative (MYC)

Crew for Restoring the Urban Environment (CRUE)

Troutdale Grade School, Barbara Morita's 5th Grade Class

PROJECT RELATION TO GREENSPACES PROGRAM

METRO and the City of Troutdale identified Beaver Creek and the Sandy River as regionally significant Greenways. The unnamed creek running from Strawberry Meadows and through Harlow Canyon is a tributary to Beaver Creek. Beaver Creek joins the Sandy River a short distance from where this small tributary enters Beaver Creek. The project's improvement in slope stability and plant diversity will positively affect water quality and habitat value within the greenway.

The project site is located near a grade school and a recently constructed residential subdivision so educational values, in keeping with METRO's goals, can be met.

WHAT WORKED/WHAT DIDN'T WORK/ HELPFUL HINTS

The project proposal identified an erosion problem that quickly grew beyond the original project scope. Accommodating and coordinating with the Public Works Department created changes and delayed the project.

Relying on youth programs for key labor sources also created a delay, as the programs were inactive during the summer months.

Northwest Natives, the nursery selected for plant materials, supplied excellent stock and provided delivery as requested.

ADVICE FOR OTHER PROJECT MANAGERS

Check with the Department or Agency with storm-water responsibility as a first step when planning a project that involves a "drainage" issue.

When a change in scope is made due to outside influences, be ready to adapt to the circumstances. The Strawberry Meadows project reduced plans from a \$9,660.00 project to a \$4,325.00 (less than half) project. The Public Works Storm-water Fund was the source utilized for the \$227,135.00 expended within the project site. If another source is identified to accomplish the goal, then accommodate quickly.

MONITORING AND MAINTENANCE PLAN

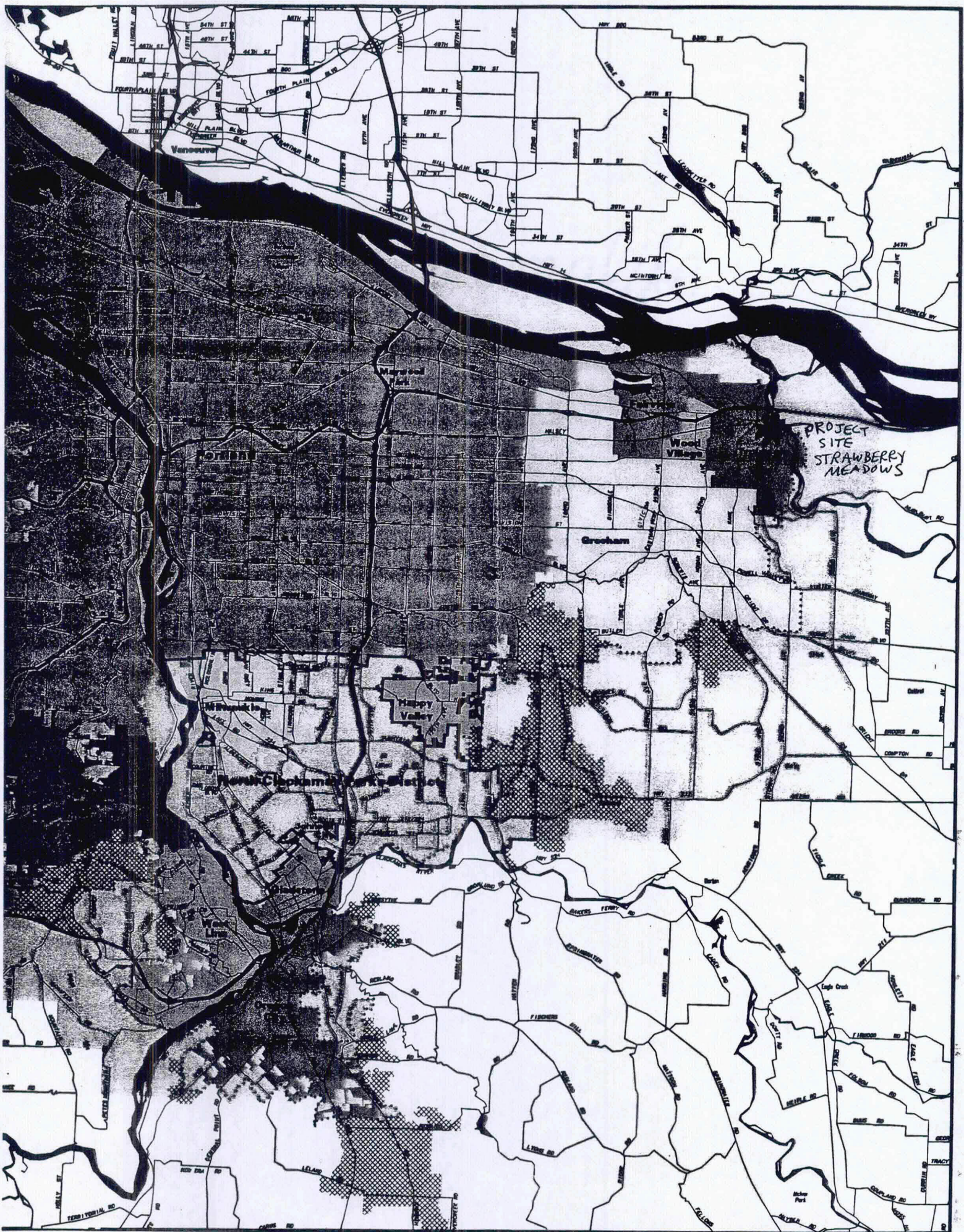
Valerie Lantz, Project Manager, is continuing long-term monitoring and maintenance activities at the site. On-site observations are made on a minimum of a monthly basis. City of Troutdale maintenance staff is available for responding to erosion control maintenance and weed control. Follow-up berry vine control is needed at least once each quarter for two years.

Troutdale Grade School classes are planning to monitor and report on their findings over this school year. Barbara Morita, the teacher, plans on continuing into next school year too.

Replacement plantings, if needed, are planned for fall of 2000. MYC &/or CRUE will be utilized for replanting labor and are budgeted within the City's General Fund.

QUANTITIES & SPECIES OF PLANT MATERIALS PLANTED

| | |
|-----------|------------------------------|
| 50 | Western Red Cedar |
| 25 | Red Alder |
| 25 | Pacific Willow |
| 50 | Scouler's Willow |
| 50 | Sitka Willow |
| 10 | Bigleaf Maple |
| 25 | Vine Maple |
| 50 | Redtwig Dogwood |
| 50 | Snowberry |
| 120 | Thimbleberry |
| 100 | Salmonberry |
| 50 | Sword fern |
| 50 | Deer fern |
| 30 | Pacific Ninebark |
| 25 | Blue elderberry |
| 10 | Black Hawthorn |
| 15 | Devil's Club |
| <u>25</u> | <u>Red Elderberry</u> |
| 760 | Total Plants (1 gallon size) |



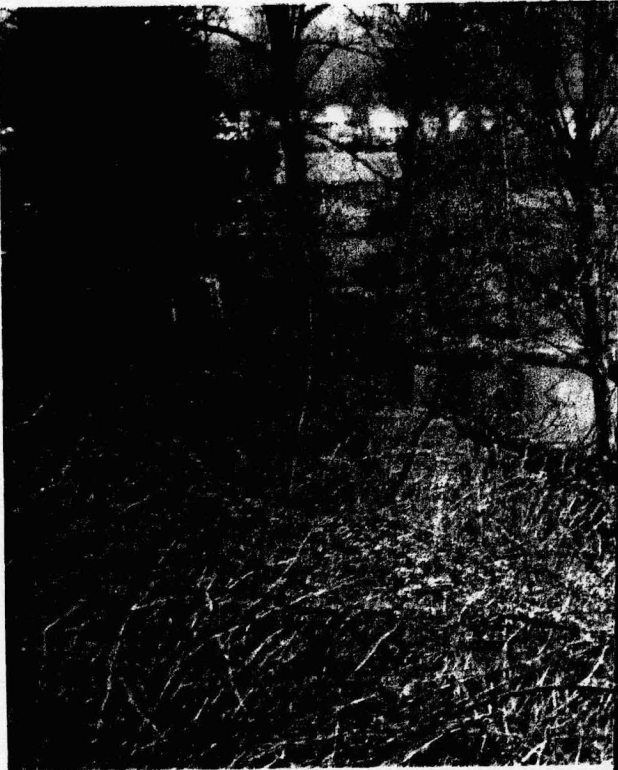
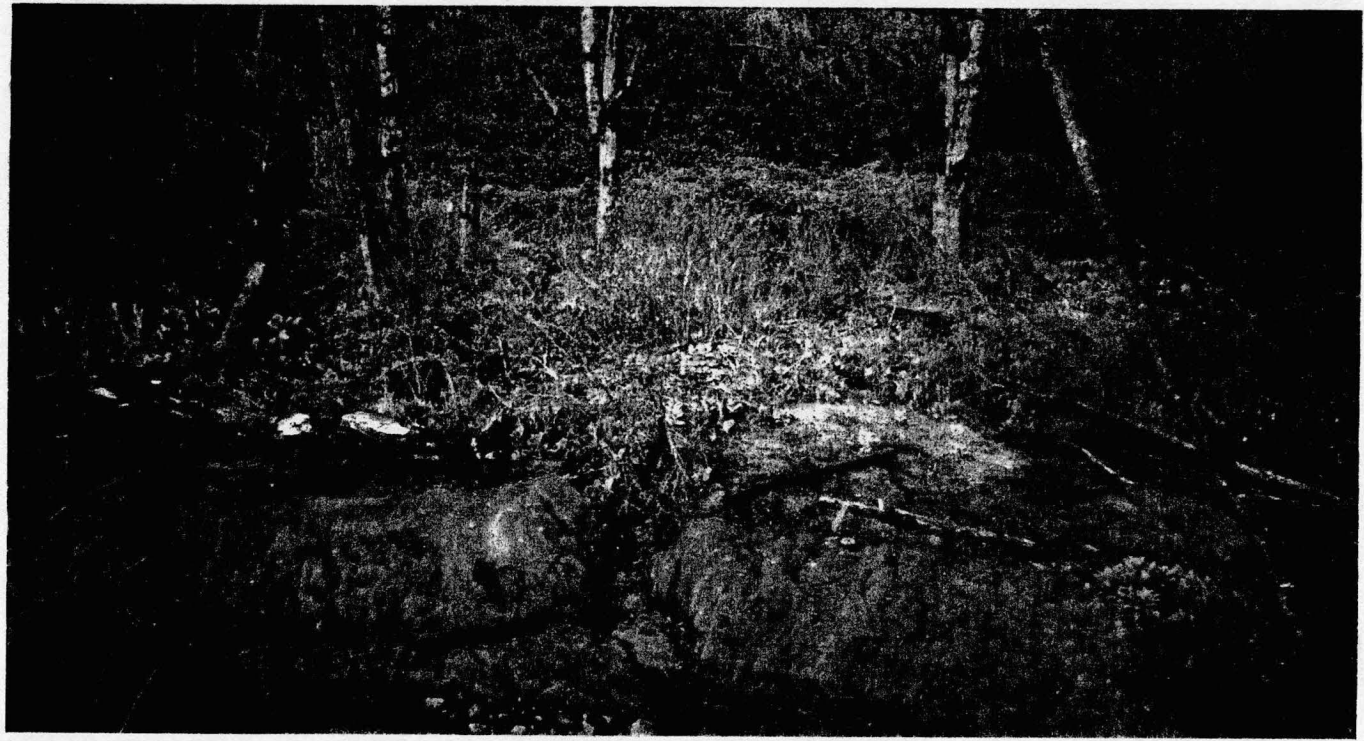
Straw berry Meadows



BEFORE



AFTER





Strawberry Meadows
Spring 2000