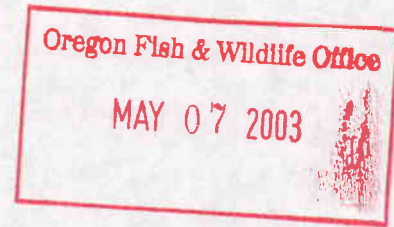


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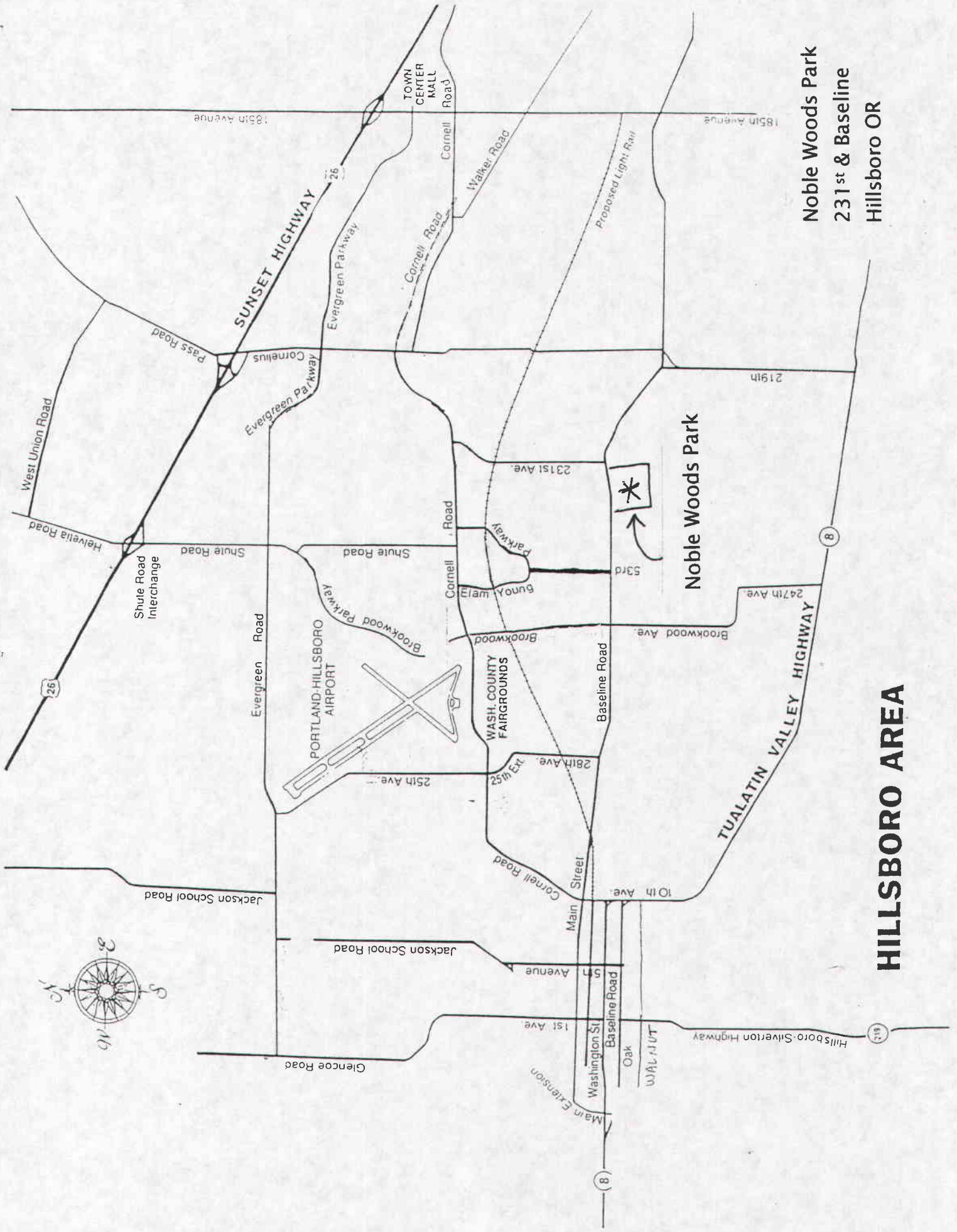
CITY OF HILLSBORO

TS: 03-3464



Butterfly Enhancement, Noble Woods Park 2000

Metro Greenspace Restoration Project # 921716
Project Funding Year: 2000
Hillsboro Parks and Recreation
Hillsboro, OR



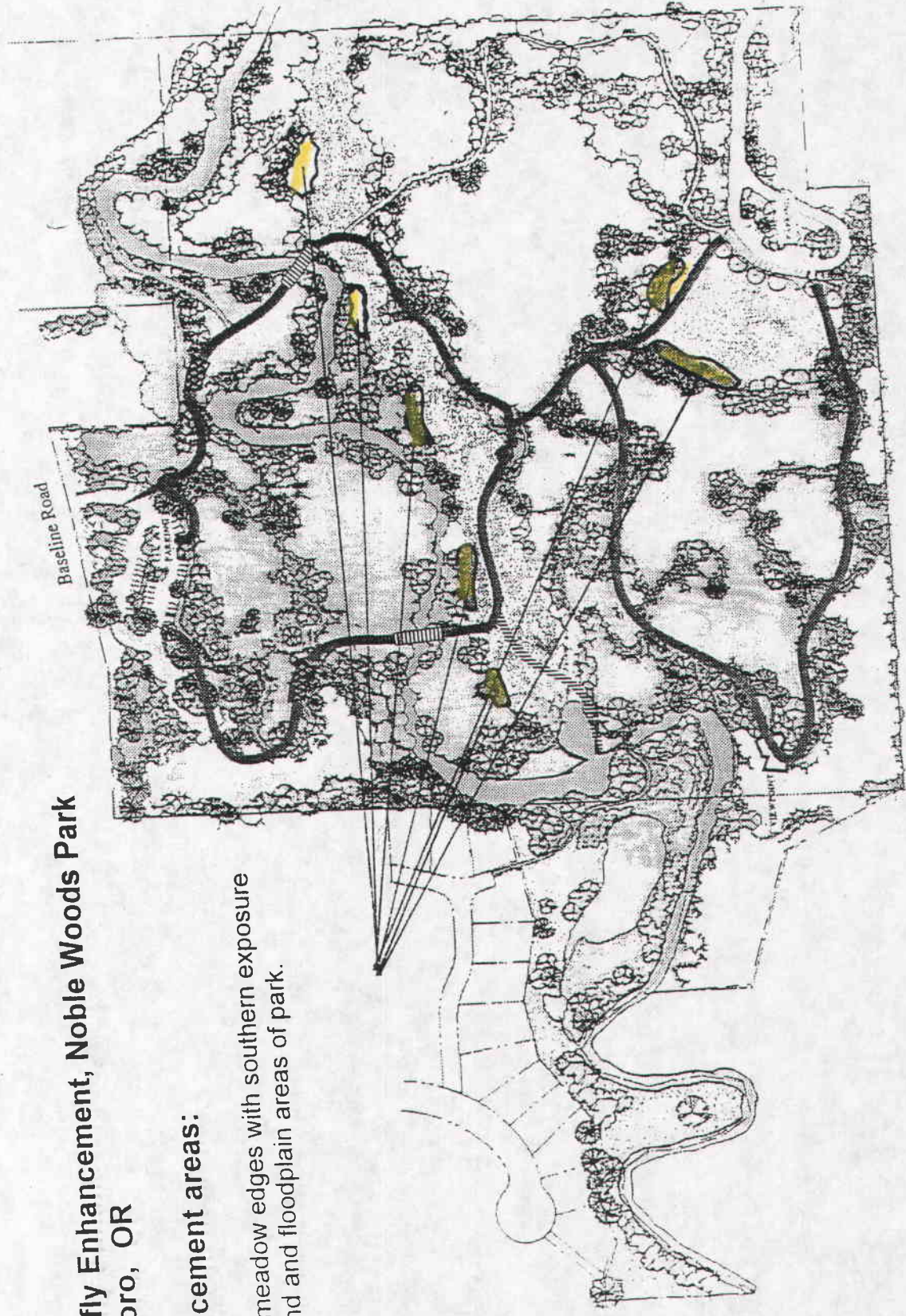
Noble Woods Park
 231st & Baseline
 Hillsboro OR

HILLSBORO AREA

**Butterfly Enhancement, Noble Woods Park
Hillsboro, OR**

enhancement areas:

Forest/meadow edges with southern exposure
in upland and floodplain areas of park.



Noble Woods Park

Photo Points



Butterfly Enhancement, Noble Woods Park 2000

Metro Greenspace Restoration Project # 921716
Hillsboro Parks and Recreation

Project Description as it really happened

The purpose of the project was to enhance natural areas within Noble Woods Park, a 37 acre nature park in Hillsboro, with a variety of native plants specifically selected to provide habitat for butterflies and other pollinating insects. The project was designed to enhance the "edge areas" along the riparian corridor and woodland with plantings. The edge areas selected include segments along the existing riparian corridor in the floodplain along Rock Creek as well as edges in an upland area of the park between the forest edge and a mowed turf lawn. The project also included manual removal of invasive plants (Himalayan blackberry, some English ivy) prior to planting installation. A variety of youth and adult volunteer groups were involved with the project, which was broken down into many smaller projects so that many groups could participate over the course of implementation. The major group helping with the project was the Miller Education Center, Hillsboro's Alternative High School; this school has helped throughout the course of the project, and helps with on-going maintenance through year round service days at the park.

While the project was originally intended for planting installation in the fall of 2000, the project was delayed because of other events in the City of Hillsboro, which disrupted planning and work schedules. (The City had just completed construction of a new sports stadium, and was asked to host Portland State University and other private school games when Portland's Civic Stadium was undergoing renovation. The level of effort required to host these huge events pre-empted other projects for the fall of 2000, so this was postponed.)

Riparian corridor: The south side of Rock Creek was targeted for enhancement plantings, because it offered open area, the solar exposure preferred by insects, and proximity to water (Rock Creek and an enhanced wetland area.) The extent of existing riparian corridor vegetation varied, from areas with minimal buffer (ie < 20 foot buffer) to areas with extensive buffer of native shrubs and trees (>50 feet of intact buffer vegetation). Over 20 years ago, the floodplain had been disturbed when a trunk sewer line was installed, clearing a wide swath through the existing ash woodland forest. When the property was purchased for a park in 1992, the disturbed area over the sewer line was largely open, with reed canary grass and other meadow grasses, and few small trees. As a now developed park, the grassy open area is mowed several times a year, primarily to prevent expansion of blackberries, and also to reduce seasonal fire danger. The enhancement plantings were planted to broaden the width of the riparian corridor, and to create a transition between woodland and the occasionally mowed grass.

Plants selected for the riparian enhancement include plants that were suitable for floodplain conditions, and also on published lists of plants preferred by butterflies at

various stages (larval, pupa, adult). While many of the selected plants flower, others provide habitat as a food source through foliage. (Information on preferred plants was provided by National Wildlife Federation, Xerces Society, and research by a local high school student.)

Upland forest edge: There is a 1+ acre open turf area on the south side of the park, near the parking lot and trailhead that is surrounded by native woodland. This is the only area of the park with a maintained turf area, and in the future it will be developed with a small picnic shelter. Enhancement plantings were planted on the west, north and east edges of the lawn/forest edge, where they would get full sun at different times throughout the day. An edge area of roughly 8-15 feet in width was cleared around the perimeter of the lawn, and top dressed with wood chips as a mulch cover to prevent weed growth while waiting for plantings. Some areas had blackberries that needed to be removed prior to planting. There was existing irrigation in the turf grass areas, and this was modified to provide some irrigation of the edge plantings.

Plant materials selected for this area of the park were chosen from a wider variety of native plants because the conditions were upland in nature, with conditions ranging from areas with more sun to fairly shady, dryer areas to moist areas. As this is a more developed, entry area to the park, effort was made to select plants with a wide range of bloom time, from early spring to late summer. The blooms would not only attract butterflies (which are interesting and attractive to park visitors) but provide color in and of themselves so make the park more appealing to human visitors. Also, as the adjoining turf is mowed, we could use lower growing plants, including perennials such as bleeding heart, lupine and camassia because they would not be overgrown with the tall meadow grasses.

Native plants are not typically available in large sizes; for most shrubs or trees, only 1 gallon plants were available. For the perennials, typically only 4" pots were available. Plants were spaced out according to their eventual size, so the first season there was not a dramatic visual impact after the plantings.

We were cautious in using some of the perennials, as we had not used those in park settings before and did not know what to expect in terms of survival rates under various conditions. These plants were small when purchased, typically 4" size. We experimented with small quantities of these plants.

Other aspects of habitat enhancement will be implemented in the summer of 2003. This includes adding boulders and sand / gravel areas to provide "mineral licks" and basking areas for butterflies. These were postponed during summer 2002 because the heavy equipment needed to bring boulders on-site was not available during the student work crew period. Also, as the habitat plantings mature and become taller than surrounding grasses, then the nearby grass areas will be mowed less often or not at all (they are mowed initially to reduce competition for the new plants as they are getting established). This will allow for tall grasses and meadow habitat to complement the other plants serving pollinators.

Goals and benefits of the projects:

Primary goals:

- Enhance habitat for pollinating insects, especially butterflies
- Involve community in the enhancement project
- Expand breadth of vegetated riparian corridor

Secondary goals:

- Provide environmental educational opportunities through service learning
- Use native plants to discourage unwelcome human access (ie block informal trails to creek and woodland)

Project Staff / workers / volunteers

The primary project staff included Mary Ordal, Project Manager for Hillsboro Parks and Recreation, members of the Hillsboro Parks Maintenance Department, and the Miller Education Center (the Alternative High School for Hillsboro School District 1J). Other volunteer groups included several groups of girl scouts and boy scouts, the Washington County Juvenile Crew, adults with Centro Cultural and Lauri Mullen and Courtney Drake with the Tualatin River Keepers. A student from Century High School did a senior project researching butterfly species native to this part of the Willamette Valley and their habitat requirements. Matthew Shepard of Xerces Society and Beth Stout of the National Wildlife Federation also provided information on native habitat plants.

The Miller Education Center runs a summer student work and learn program, and has partnered with the City of Hillsboro Parks and Recreation Department for many years. The program provides service learning opportunities for disadvantaged youth, and links the service learning to academic work. This makes for a meaningful project for the students, and a productive work crew for the Department, enabling the completion of numerous habitat enhancement projects. The work crew fee (grant funded) paid to the MEC program crew is leveraged by the school to secure other funds for their program, to the benefit of both the City and school. The student work crew of up to 25 students and three teachers worked on the project. (The actual on site crew size varied daily, as some students spent time on related classroom activities. Two of the three teachers were always on site with the crew students, and serve as work crew supervisors.)

The Miller Education Center teachers included Jerry Johnson, Pete Moshinsky, Greg Jensen, Pete Daggett. Other MEC staff support was provided by Beth Johnson and Larry Veltrie. The list of student work crew participants is attached.

How project relates to the Greenspace Program:

Noble Woods Park is on Rock Creek, which is one of the target greenspace areas adopted by Metro in their Greenspace planning efforts. Local Share Funds from the Greenspace program were used in the original development of the park. This park is near and dear to the hearts of Hillsboro residents, who created the park as a result of a massive fundraising effort. The park has been used by many schools as part of their outdoor education and