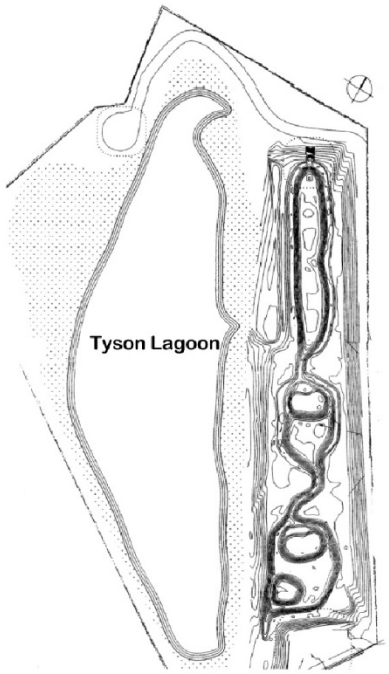
PROJECTS FOR IRVINGTON BENCHMARK ENVIRONMENTAL "CHANGE"

2023—24

Tule Ponds at Tyson Lagoon, is a 17 acre open fresh water aquatic environment. The entrance is at 1999 Walnut Ave. The Math Science Nucleus manages the wetland area for Alameda County Flood Control and Water Conservation District.



Our staff provide a safe educational experience to help restore and maintain the local environment. Keeping up a wetland in the middle of a city is difficult because of all the non-native plants that invade the area. Native plants provide a haven for native animals and helps remove carbon from the environment.

Rules: A project will be assigned to your group. We expect students to do their project in a timely matter and not to abuse or break tools. We have limited projects and it is first come, first served.

We provide gloves and tools for most projects. Tools should be used for their intended purpose. If tools are broken because of misuse, we will expect your group to replace that item. You have 10 hours to work on the project that best fits your research paper on the environment. We recommend that you spend 3 weekends in a row to complete your project and leave 1 hour to come back and take pictures for your project. If you come to Tule Ponds sporadically, we might have to give your project to another group and when you return put you on a similar project. Please remember that rain can affect work. It is much better to get your hours complete before the rains. It helps us prepare the environment.

You will need to sign in when you arrive on the master sign in. Irvington Students also have a project sign in, so it is easy to see how many hours you have accumulated. Work times are Saturdays 9 am-12 and sometimes 1-3 pm (check calendar). There must be at least 2 members of your group to work. If a member is by themselves they can be assigned to another project for that day. If a group does not do their work, we can ban just the individual, not the entire group. There are a limited amount of projects.

You can have staff sign your Service forms the day you work or at the end of the project.

Community Service Projects Available

1. Invasive plant removal (the largest problem on the site) (many projects)

We have many non-native plants that need removal including:

a. Vines including Himalayan Blackberry, Ivy
b. Curly dock and pepperweed
c. Pitchfork
d. thistle
e. Some grasses
f. Others that might pop up

Some native plants also need to be removed because they are aggressive growers.

a. Cattails (including removal of seed heads)
b. Native tree saplings

Non-native trees

a. White ash (seedlings)
b. Pivet (seedlings)
c. Buckthorn
d. Myroban (seedlings)

2. Animal habitat restoration (2 projects available)

We have several areas where the animals (raccoons, opossum, skunk, cats) take cover during the rainy season. You can help clean an area or rebuild some of the structures that need cover. We have set areas. They need to be cleaned around the area and make sure the shelter is protected. We might make new areas that would need to be cleared, especially in blackberry areas.

3. Trash and other debris from surrounding community via storm drains.

The trash from surrounding communities comes into the storm drains and need to be removed. We also have a problem with too many branches that get into the waterway and add tannic acid as they deteriorated. Picking up trash and branches is included in this service.

4. Nectar areas for bees, butterflies, hummingbirds

There are several areas that we maintain as Nectar gardens.

a. Plant flowers in green house and then transplant
b. Clear areas and plant seeds
c. Remove weeds and develop ways to keep weeds out
d. Finding native seeds to include in our seed bank

5. Animal habitat restoration (possible 10-15 projects)

We have many animals that live in Tule Ponds, area around some of the established area need clearing.

a. Clearing areas around raccoon houses – students can locate raccoon habitats and preserve the structure, clear brambles and other invasives that may harm animals.
b. Butterfly habitats
    - Students pick one type of butterfly and focus on planting host plants to attract more butterflies
c. Amphibian habitats
    - Keeping back creeks clear
d. Reptile habitats
    - Areas surrounding wetland get dry during the summertime and are inhabited by reptiles. Build wood shelters with logs
e. Fish habitats
   Cleaning artificial ponds of mud

6. Soil

Making soil areas by mixing native soil with compost.

a. Creating soil for transplanting projects
b. Adding soil to different areas for native plant growth
c. Mulching around young trees

7. Upkeeping trails

Removing invasives from trails, clipping bushes and trees back from trail, adding mulch

a. Main trails (b/w tyson lagoon and ponds, bart trail)
b. Small hidden trails (6 areas – near Tyson Lagoon, near middle trail, near bridge 2, near bird blind, near tule hut, near pond A and Tyson Lagoon)