

**PROJECTS FOR IRVINGTON ENVIRONMENTAL “CHANGE”  
2022-23**

***PLEASE NOTE: THERE IS LIMITED NUMBER OF PROJECTS  
FIRST COME, FIRST SERVED***

Tule Ponds at Tyson Lagoon, is a 17 acre open fresh water aquatic environment. 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 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 will need to sign in when you arrive. 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 1-3 pm. 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.

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

**Community Service Projects Available: (note number of projects depends on need)**

**1. Tree Maintenance (possible 5-10 projects)**

Our native trees are having a terrible time with the drought. Trees need to be pruned and taken care of, and lots of small saplings need to be removed or transplanted to other areas.

We also will be getting trees ready to plant in other areas. We have cleaned out our nursery

**2. Animal habitat restoration (possible 2-3 projects)**

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

### **3. Trash from surrounding community via storm drains. (possible 2-3 projects)**

Problem: How can you use the small creek to capture trash coming in from storm drains. Service: clear areas where cattails are to allow them to trap trash 2. How can you prevent trash from BART from coming under the fence? Service: picking up trash or designing a way to prevent trash from coming under the fences

### **4. Areas for bees, butterflies, hummingbirds**

Problem: Bees 1. How can you create artificial areas for bees to live? Service: Keep bee area free of invasive plants 2. How can you increase bee population? Service: planting native plants to attract bees

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

### **5. Invasive plant removal**

We have many non native plants that need removal including:

- a. Blackberry
- b. Curly dock
- c. Pepperweed
- d. English Ivy
- e. pitchfork

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

- a. Cattails (including removal of seed heads)

Non native trees

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

Native trees

- a. Oak
- b. Fremont Cottonwood

6. Birds 1. Is Tule Ponds providing enough habitat for nests? Service: planting trees, shrubs, or plants with seeds 2. Making habitat for Clapper Rail at Tule Ponds (removal of cattails)

### **7. Butterflies**

1. Which butterflies like what host plants? Service: pick one butterfly and determine its cycle and then plant the appropriate host plant. 2. Expanding butterfly meadow, presently have unknown caterpillars (would be nice to identify)

### **8. Hydrology**

Comparing constructed and natural wetlands Service: clearing sections of creek for better flow

### **7. Pollution**

1. How can the Tule Ponds at Tyson Lagoon educate the community on nonpoint pollution?

### **8. Amphibian Habitat**

Working along the creek bed to increase the yellow legged frog habitat. (this is hand digging creek bed)

### **9. Reptile Habitat**

Lizards (how can you create more habitat)

### **10. Fish Habitat - Native Fish**

1. find out how to increase the native fish population (how can be rear fish and put them in Tyson Lagoon) - shallow warm lake (research on how to rear fish or where to get them (1 group)

### **11. Soil**

Making soil areas by mixing native soil with compost.

During Winter Break we might have projects at California Nursery and Masonic Home Reforestation project, but we have to see about weather and other factors.