**Building a pond in Tucson Unified School District (Spring, 2024)**

**Why build a pond?**

* Encourage wildlife species such as birds, dragonflies, damselflies to visit and establish a ‘home.’
* Enhance environmental learning opportunities at an urban school.
* Establish a peaceful, relaxing space for children and the community.

**Site Location**

Enclosed/fenced in area. School garden is ideal location. Six-foot-high fencing is necessary with secured access (locked gate or restricted door).

1. **Administrator** approval for the project. Include sketch/map and photos of the proposed site. Dimensions and google map are helpful.

2. Justification for the project includes state science standards.

L2 and L4: Organisms require a supply of energy for which they depend on or compete with other organisms; unity and diversity of organisms.

U1: explain evidence using phenomena obtained from observations or investigations, develop models and theories

CC: patterns, cause/effect, systems and system models, structure and function, stability and change

Students will design and help establish the habitat by researching plants, invertebrate species, vector control, etc. Our pond is to attract Odonata species so that we can study them.

Pond should be accessible to all students for observational science, comparative studies (site vs. Santa Cruz River, for example). Our site is a community school so the pond will be accessible to neighbors.

3. Once principal has approved the project contact Risk Management for inspection/overview: checking for utilities (electrical overhead, for example), fencing needs, accessibility, safety.

4. **Risk Management** contacts: **Nicole Lowery, Josue Zuniga** 225-6601

5. **Site Improvement** form. **Jana Sanchez** CSC Lead 225-4825

<https://nam04.safelinks.protection.outlook.com/?url=https%3A%2F%2Facrobat.adobe.com%2Flink%2Freview%3Furi%3Durn%3Aaaid%3Ascds%3AUS%3A60c76fad-7e88-48e2-9412-b82ec9b9515b&data=05%7C01%7CNina.Hipps%40tusd1.org%7C9356f77088a54063147008dba3ea7c78%7Cbc7050e04bcc48099245ea8b65084865%7C0%7C0%7C638283999771479102%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000%7C%7C%7C&sdata=GqKaLn4rY%2FMmzuVRy35TsF7zZBqA1KeGoBOFb5v5M4M%3D&reserved=0>

**Timothy Stevens** (he is your go-to person in TUSD), **Projects and Planning**, TUSD Operations 225-4884. He will arrange for the district to blue stake the area.

TUSD will not use district employees to build anything. They encourage use of private licensed contractors (donate their time, expertise). I am using a member of our school community (Higher Ground) who has experience in construction to help us install the fence. We also have a church group that meets at our school and loves school improvement projects. There are faith-based organizations who like to help schools. Lowe’s has grants for school projects, too.

<https://www.communitydevelopmentgrants.info/Grant-Details/gid/16792>

6. Stock tank pond. Can use various sizes. I am going to use a 6’ diameter steel stock tank. It will sit above ground. Need water source, hose, float valve, aerator.

I plan to obtain fencing and associated materials from Tractor Supply. OK Feed and Supply store on Ft. Lowell also has stock tanks (order). Fencing is coated steel panels, easier to install than chain link. Gate panels match.

My supply list includes:

6’ H x 6’ W fence panels

6’ H x 4’ W gate

Posts

Clips (for fence)

Sakrete

Quick crete

Hose

Float valve

Riparian plants (Tucson Cactus and Koi N. Oracle Rd., Pond Plants and More W. Ruthraff Rd.)

Engraved metal signs

Gate lock

Small, deciduous tree for partial shade

<https://www.tractorsupply.com/tsc/product/ironcraft-fences-euro-steel-fence-panel-6-ft-x-6-ft-838946>

7. Students will research Arizona riparian habitats, Odonata habitats, and mosquito control. Students will be the primary builders of the habitat and also be responsible for its maintenance (under supervision).

8. Durable signage: describing the project and its link to the Santa Cruz River.

9. Tours: for school classes and community members. Students will write the ‘script’ for the tours, including how the habitat was built and connection to riparian ecosystems/habitats.

10. Consider benches or other seating, plants to attract birds or pollinators.