[redacted]

Mr. Clark,

It's been a pleasure to work with you in an effort to enhance Grande Hills Lake. It is clear that you are already equipped with a wealth of knowledge regarding pond (small lake) management. The residents of Grande Hills are in good hands with you leading the charge.

As we have discussed previously, the first objective is to establish the main goal of the homeowners. Simply put, what do they want out of the lake? Are they just concerned with aesthetics? Do they want to grow large fish? Do they want it to be easy for anyone to catch a fish (regardless of size)? Do they care about a balanced fish population? Once the goal is established, certain management strategies can be implemented to achieve said goal.

Below, I will lay out some strategies and their associated benefits and/or drawbacks.

1. Drawdown – lowering the water level by about 3 feet every other year (during the fall) is probably the single best action that can be taken for this particular lake. During our assessment, we noticed that the bottom substrate has a thick layer of decayed organic material (detritus) that has been accumulating for many years. Drawdowns will allow the substrate along the outer edge of the pond to dry and compact. The resulting, firmer substrate is more suitable for Centrarchid (bass / sunfish) spawning and is more conducive to submerged aquatic vegetation (SAV) growth. Increased SAV growth and better spawning habitat will lead to an overall healthier fish population. Drawdowns have proven to be a great management tool, and they cost little or no money. Although drawdowns have their obvious benefits, they are often frowned upon by residents because of the inconvenience and unpleasant look. However, the result of a reenergized pond is worth it.
2. Fish Stocking – during our assessment, we observed an unhealthy fish population. Overall numbers were low and all largemouth bass were less than 12" and very thin. Largemouth bass can often be used as an indicator of overall health due to their position at the top of the food chain. We would certainly recommend stocking some fish. The amount and species depends on the goal of the homeowners. Here are a few options [consult Farm Pond Book for rates and timing (attached)]:
    a. Blue gill / redear mix (bream mix) with largemouth bass – this will lead to an overall balanced fish population and enhance the current gene pool of largemouth bass. Increased number of bream will also allow for kids to catch more fish.
    b. Catfish – easier for kids to catch, could potentially make the water more turbid (can be done in conjunction with option A).
    c. Threadfin shad (in addition to option A) - to be stocked the year after largemouth bass. Threadfin shad are great forage and should make for larger bass.
3. Water Quality Enhancement – lime (balance pH) / fertilize to increase productivity. The water is very clear right now, and that could be helped by a little increase in productivity. Due to excessive water exchange, this would probably have to be done annually, which can get expensive.
    a. Note: although it is possible to grow larger fish with certain management strategies, this pond is likely not going to produce trophy bass. Low-productivity water combined with a lot of water exchange make it difficult to produce many trophy bass.
4. Aerator – not a necessity, but any increase in dissolved oxygen levels is a good thing in this steamy, south LA climate.

5. Harvest – if the decision is made to stock more bass and sunfish, effort should be made to remove older, skinny bass (big head, small body).
6. Encourage the use of fish feeders.
7. Artificial structure – this pond does not have a lot of natural cover. We would recommend strategically placing artificial structures throughout the pond.
    a. Maybe develop a Christmas tree reef program
8. Gravel Beds – putting gravel beds in 1' – 4' of water around the pond will enhance reproduction of both bass and bream.
    a. Note: this can be more easily accomplished while the pond is lowered by 3 feet.
    b. Studies show that bass and bream prefer different size gravel beds: Bass < 100 sq. ft. ; bream > 100 sq. ft.

I have attached our "Management of Recreational and Farm Ponds in Louisiana" book for reference. It is a great publication.

Please feel free to contact me with any other questions or concerns. [redacted]

Thanks,

Jonathan Winslow
Biologist III
[redacted]