

Floating or Fixed? Choosing the Right Dock for Your Lake

A free DockSmarts guide for lakefront homeowners in Texas and the South

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If you're planning a new dock or replacing an old one, the first big decision is whether to build a **floating dock** or a **fixed dock**. Get this one right and everything after it (the boat lift, the walkway, the roof, the upkeep) gets easier. Get it wrong and you'll be fighting your dock for as long as you own it.

After more than 30 years building on lakes around East Texas, here's how I'd think it through.

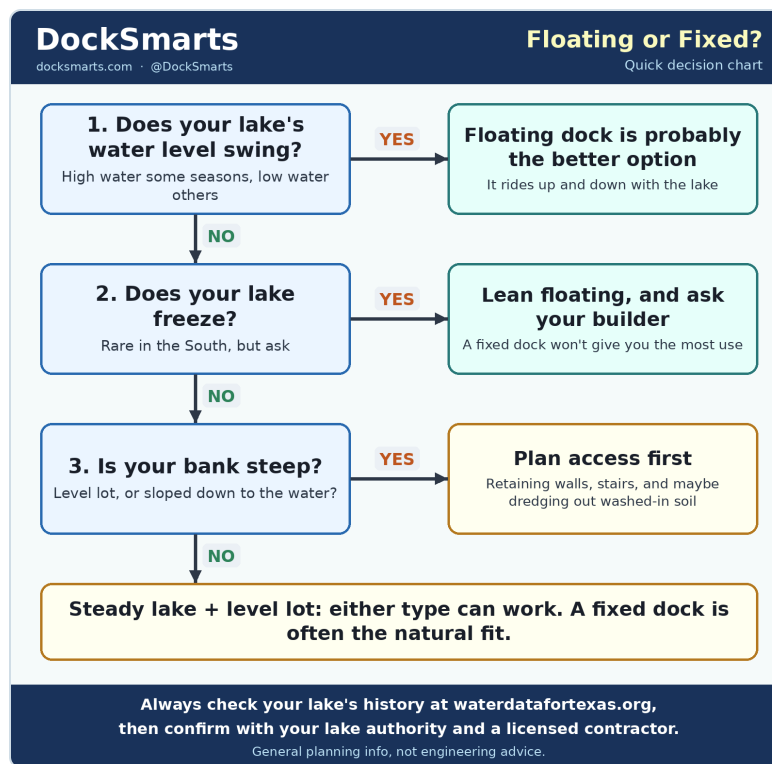


Figure: A quick path from your lake's water behavior to floating or fixed.

My Rule of Thumb: Watch the Water

It starts with one question: **how much does your lake's water level move?**

- **If your lake typically fluctuates** (high water some seasons, low water others), a **floating dock is probably the better option** for you. It rides up and down with the lake, so it stays usable whether the water is up or down.
- **If your lake holds a relatively stable level**, a **fixed dock may be the better fit**. When the water stays put, a dock that stays put makes sense.

Then ask a second question: **does your lake freeze?** Most Southern lakes rarely do, but if yours does, that has to be part of the decision too. On floating docks where winters may see freezing conditions, it may be necessary to take off your boathouse portion and remove your boat over the winter so it doesn't damage the dock itself.

None of these questions should be skipped. They all need answering before you decide.

Look Up Your Lake's History First

Don't go by memory or by what the neighbors say. Look at the record. In Texas, the Texas Water Development Board's **Water Data for Texas** site (waterdatafortexas.org) charts reservoir levels over time, so you can see how high and how low your lake has actually gone. Most major Texas reservoirs are listed. Pay special attention to the **lowest** levels during droughts, not just normal full pool.

Your lake's permit authority (a river authority, water district, the Corps of Engineers, or a city, depending on the lake) can also tell you what to expect and what types of docks they allow. Call them before you settle on a design.

What Happens When You Build the Wrong Type

Building the wrong type of dock for your lake can cause serious problems.

If you're on water that fluctuates or freezes, a fixed dock isn't going to give you the most options for using it. On a lake that holds a steady level, a fixed dock lines up better with what you need.

Here are the common problems I see with **fixed docks on lakes that move**:

- **Structural distortion.** When the water drops low enough, it can cause distortion in the overall structure of the dock.
- **Drought periods.** Even lakes that are usually steady go through occasional droughts. A fixed dock can't follow the water down.
- **Ongoing dredging.** To keep the boat lift reachable, some fixed docks need annual maintenance like dredging. That's a cost that comes back year after year.

How Your Bank Slope and Water Depth Change the Answer

The shape of your lot matters as much as the water does.

- **Level lot on a stable lake:** Either type of dock would probably work for you. You have the most freedom here.
- **Sloped bank:** There's more to think about, starting with **how you'll get down to the dock or boathouse**. A steep bank may call for:
 - **Retaining walls** to hold the bank in place
 - **Staircases** for safe access
 - **Dredging** to clear out soil that has eroded and washed into the spot where the dock or boathouse will sit

Water depth at the end of your dock also changes your parameters. For example, depending on how far out you're allowed to go with your boathouse, water depths matter. That limit comes from your lake's permit authority, so check it early.

Budget for these from the start. They're part of the real cost of the project, not extras you can figure out later.

Floating Dock Watch-Outs

Floating docks aren't set-and-forget either. With fluctuating water levels, additional ramp (walkway) lengths or angles may be necessary so you can still reach the dock when the water is low. You'll also need to consider how you anchor the boathouse, and any rocks or debris on the bottom that could damage your structural flotation if lake levels drop.

Freshwater or Saltwater? It Changes Your Pilings

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One more thing that often gets overlooked: **freshwater and saltwater need different treatment levels for your pilings**. On a freshwater lake, **0.60 treated** pilings are sufficient. On brackish or saltwater, the pilings need to be treated to a **2.50 level**. Ask your builder which treatment they're using before the wood goes in the water—it's not a detail you can fix later.

Floating vs. Fixed at a Glance

	Floating Dock	Fixed Dock
Best for	Lakes whose level typically fluctuates (high water and low water)	Lakes that hold a relatively stable level
Watch-outs	Anchoring the boathouse; rocks or debris on the bottom that can damage flotation when levels drop; walkway/ramp length and angle at low water; on freezing lakes, remove the boat and boathouse portion for winter	Low water can distort the structure; droughts can leave it out of reach of the water
Maintenance	Check anchors, floats, and walkway angle after big level swings; clear bottom hazards before low water	May need annual dredging to keep the boat lift usable, plus regular checks after low-water periods

Quick Decision Checklist: Answer These 6 Questions

1. **Does my lake's water level swing**, or does it stay fairly steady? (Check waterdatafortexas.org.)
2. **How low has it gone in past droughts?** Would a fixed dock end up sitting high and dry?
3. **Does my lake ever freeze?** If so, am I prepared to pull the boat and boathouse portion for winter on a floating dock?

4. **Is my lot level, or is the bank sloped?** If sloped, will I need retaining walls, stairs or dredging?
5. **What is the water depth at the end of the dock, and how far out does my lake authority allow me to go?**
6. **What does my lake's permit authority allow?** Have I talked to them and to a licensed contractor who has built on *this* lake?

If your answers point to a moving lake, lean floating. If they point to a steady lake on a level lot, either can work, and fixed is often the natural fit.

Get More Straight Talk on Docks

This is one of four free DockSmarts guides. Join the **DockSmarts newsletter at docksmarts.com** for practical tips on permits, hiring a builder, storm and drought prep, and more, straight from someone who's spent a career on the water.

Disclaimer: This guide is general planning information, not engineering advice. Rules vary by lake and change over time. Confirm with your lake authority and a licensed contractor before you build.