



O'BrienEngineering, Inc.

Hydraulics . Hydrology . Civil Engineering

Quick Links

[About OEI](#)
[Contact OEI](#)
[FEMA's Website](#)
[FEMA Product Catalog](#)
[Effective Maps](#)
[Historic FIRMs/FHBMs](#)

A Little Change in FEMA's Lingo

When you see the phrase "1% annual chance flood" it probably refers to what you've always known as the "100-year flood." It's a more accurate way of describing an event which statistically has the chance of 1% (.01 probability, for you real diehards) of being exceeded in any year. It's a similar change for each of the other events...10% (.1 probability) for the 10-year, 4% (.04 probability) for the 25-year - just invert the frequency to get the probability and multiply by 100 to get the percentage (e.g.: 1/500 yr = .02 and multiplied times 100 = 2%).

[Join Our Mailing List!](#)

O'Brien Engineering, Inc.
(p) 972-233-2288
info@obrieneng.com
(e) Jim O'Brien:
jobrien@obrieneng.com
VOSB/Veteran Owned
Since 1987

**O'Brien
Engineering, Inc.**
972.233.2288 (p)
info@obrieneng.com
Jim O'Brien
jobrien@obrieneng.com
VOSB/Veteran Owned
Since 1987

While We Were Sleeping...

Floodplain Mapping Is Changing.

While the economy has slowed down (classic example of understatement), regulatory flux has not. Many Texas counties have new effective Flood Insurance Rate Maps (FIRMs) whereas many others are in transition, with the old maps remaining "Effective," while the new ones remain "Preliminary." Still other counties are awaiting the imminent release of the "Preliminary" FIRMs.

One of the first considerations bearing on the feasibility of a project is the presence and scope of floodplain on the property. Most engineers, developers, and surveyors have the experience of retrieving FEMA floodplain data - maps, Flood Insurance Studies, and Map Change information - from FEMA's Map Service Center website, downloading the index, and next, the specific numbered panel to view the floodplain for the site (1" = 1000' usually, but hey, we have good eyesight and excellent map transfer skills, right?). Alternatively, maybe you've used the GIS data from the county tax assessor's website.

However, with all of the change that is underway as a result of FEMA's MapMod and now RiskMap programs, the traditional means of assessing a tract's floodplain are now highly subjective. FEMA is the official "keeper" of the maps, and therefore, local Floodplain Administrators may not necessarily have the latest information relative to a certain tract of land. **There is no crying in baseball, and there is no "grandfathering" in floodplain delineations** - improvements in topographic mapping and hydraulic modeling occasionally result in smaller delineations for specific properties, but urbanization, improved hydrologic modeling, and a host of other factors often result in wider delineations, **and therefore, more floodplain on a specific tract.** As a result, if the "Preliminary" map shows more floodplain than the "Effective" map, even though a final publish date has not been determined for the new map, you cannot ignore the "Preliminary."

Unfortunately, you cannot ignore the "Effective" map in such cases either. In rare cases, but often enough to mention, it is necessary to evaluate the existing floodplain on a tract using both maps and a proposed project using the hydraulic models for both maps.

What then? **Should we all just quit and go home?** No, but you should spend more time than you have gotten used to ferreting out the floodplain on your (or your client's) property. You can start by looking on [FEMA's website](#), click on [Product Catalog](#), and then explore the menu for your needs. Be patient though, the maps within each category are changing on a fairly regular basis and the [Effective](#) map that you looked at last month may now be under [Historic FIRMs/FHBMs](#). You may also be accustomed to finding all of your required maps under your specific county named in the drilldown under "Select a Community;" this is changing as well, so don't forget to look under the specific City.

You should also talk to the jurisdictional Floodplain Administrator since many cities and counties are changing their regulations. Some may require an evaluation of ultimate watershed development flood flows, storm water detention, or valley storage. Other specific development requirements have and are changing. After you have given yourself a primer, consult your **hydrologist (like a therapist, it is the *in* thing; everyone has one)** for your specific site requirements.