What Are The Flows Going To Do?

If you are making plans to fish the Guadalupe, there is always going to be uncertainty about how much water is going to be released from Canyon Dam. This webpage gives you the tools to make an informed decision.

The most significant predictor for flows below Canyon Dam is the lake elevation of Canyon Lake itself. Using the Canyon Lake Elevation link you can retrieve 'real time' lake elevations. If Canyon Lake elevation is:

- 908.9 and below, the lake is in conservation pool. Releases are low.
- 909.0 the release rate will match the greater: Spring Branch Gage, or 90 cfs.
- 909.1 and above, the lake is in flood, heavy releases are imminent.

The Army Corps of Engineers controls the lake when it is in flood (above elevation 909.0 msl). Generally, these are extemely swift, high volume releases, and are determined by how high the lake is, downstream flooding, and other factors. The Corps wants to return the lake to the conservation pool as quickly as possible. Here are some approximate scenarios on how the Corps makes flood control releases:

- Lake Elevation 911 and higher: Heavy releases of 5000 cfs.
- Between 910 and 911: Flows will vary between 1000 to 5000 cfs.
- Between 909 and 910, flows will range from 250 up to 2500 cfs.

As you can see, the only potential for wading while the lake is in flood is between 909 and 910 elevation- and most of the time, flows are going to be too swift to fish. The exception is when the Corps of Engineers grants a 'temporary deviation' to their normal flood control release procedures. This will happen between April and August when the Corps will release flood waters at a slower rate to enhance recreation for the floaters below Canyon Dam. Flow rates will generally be the greater of: The flow rate at Spring Branch Gage; or 250 cfs. Below 909.0, The Guadalupe-Blanco River Authority controls the flow. The minimum flow is 90 - 100 cfs, and can be lower during drought. The GRTU-GBRA Flow Agreement provides trout protective flows from May 1 to September 30 in non-drought years. These flows will average around 200 cfs for the time period.

Canyon Lake elevation is important to determining flows below Canyon Dam. For a more complete picture, you'll need to review the trends. There are two stream gages above Canyon Lake: The Comfort Gage and the Spring Branch Gage. If there is high water or flooding at the Comfort Gage, it takes about 24 hours for the water to reach the lake. The Spring Branch Gage gives you a good idea of how much water is flowing into Canyon Lake. Generally, if Canyon Lake is between 909 and 910, the volume of release from Canyon Dam is going to be a little higher than the flow at the Spring Branch Gage. It is also important to review the recent history of these gages and Canyon Lake elevation itself. Patterns of rising, or falling, can indicate what will happen. At 909, the outflow will approximate the flow at the Spring Branch Gage.

There are also two stream gages and the Corps' own estimation of Canyon releases below Canyon Dam. The Corps's estimate is based on the gate opening at the dam. It is updated only twice a day. The two stream gages are updated about 6 times a day. These give you information about what is happening on the river "real time" and you should check those gages prior to leaving for the Guadalupe. Often one or more stream gages are out of commission that is why more than one source of river flow is found here. The Sattler Gage is generally considered the most accurate.

The geology of the Guadalupe River watershed is limestone formations that collects rainfall into subterranean reservoirs that release the flow back into the river from artesian springs months after the last significant rainfall. After a period of heavy rains, high inflows into the lake will persist long after the last raindrops have fallen. During the winter when the vegetation is dormant and the air temperatures are low, high inflows will persist longer. What this means is it can take a long time after the initial flood for the River to be wadable again. When the lake is drawn down near the conservation pool, the Corps and GBRA will match the inflow coming into Canyon Lake. That is one reason why the Spring Branch Gage is so important in determining what flow rates will be.

Call the Corps of Engineers

You can also call the Army Corps of Engineers recorded Canyon Lake Dam information line at **830-964-3342**