

Water Storage



Water storage can increase water security and decrease the need to draw from streams when fish need it, but you need to do a water budget to know how much storage you need. Collecting roof runoff does not require a permit. You can catch 600 gallons per 1000 sq feet of roof from only 1 inch of rain! Even if you have an ample water supply, roof catchment is a good thing to add.

Install a Water Meter!



You need a water meter that measures domestic and garden use separately to understand your water needs and to do a water budget. Make sure that you purchase a system with a leak indicator to prevent unneeded loss and water waste.

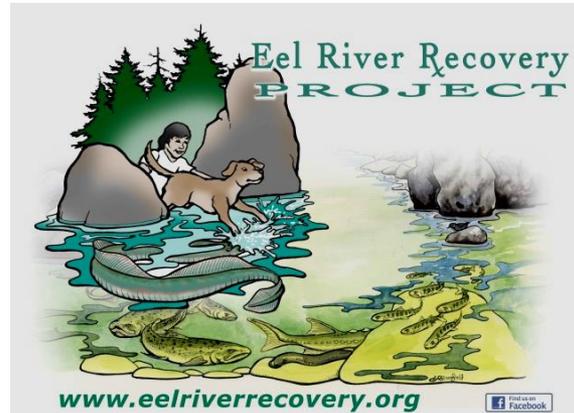
Be Prepared!

Winter is a great time to check your entire water system, from your water source, to your home, and to your garden. Make repairs and deal with all the questionable areas in your water system in the off-season to avoid a crisis in summer and fall - you will save money and stress. You also need to calculate a water budget and plan additional water storage, if needed.

Learn More & Take Action

The Eel River Recovery Project has been working with Eel River watershed residents to implement water conservation and to reduce pollution associated with growing cannabis. Our brochures, documents, and videos can help you become a more sustainable farmer. Visit

www.EelRiverRecovery.org



Brochure information provided by Larry Desmond of Mendocino WaterWorks who can be reached at (707) 459-9575

Achieving Water Security with a Water Budget



- **Be Prepared: Do the Math**
- **Acquire Needed Storage**
- **Don't Mix Sources**
- **Prevent Water Waste**
- **Share the Water w/ the Fish & Downstream Neighbors**



For more information call (707) 223-7200 or see:

www.EelRiverRecovery.org

Why Do a Budget?

With information on water availability and planned water use, you can avoid unfortunate surprises during our hot summers or prolonged dry fall periods. Water data is also required if you want to get a water permit from the State.

Assess Water Sources



The first part of calculating a water budget is assessing your water source, usually a spring, well, pond or a stream on your property. What is the measured water production? Does this vary during the season? If it does, record the flow monthly. What is really important is the water availability when you critically need it.

Important Tips

Make sure your domestic supply is secure and clean and **do not mix or commingle with questionable sources**. If you have multiple storage tanks, **make sure each has its own shut off valve** to prevent catastrophic water loss.

Water Budget Calculation

After assessing the quantity of your water supply and calculating your domestic and garden use, you are ready to do a water budget. Water production and water use should be calculated in **gallons per minute (GPM)** and multiplied by 24 hours to get **gallons per day (GPD)**. The amount of water storage needed is the difference between your water supply and use.

Example Budget #1

- Domestic use is of 100 GPD x 365 days = 36,500 gallons per year.
- April-October Garden use is 500 GPD x 210 days = 105,000 gallons per year
- Your Annual Water Use = 141,500 gallons
- Spring source is 1 GPM = 1,440 GPD = 525,600 gallons per year.
- When water supply is 2X use, then storage is optional. However, some is desirable for contingencies like fighting fires and for additional water security.

Example Budget #2

- Spring source is 1/2 GPM = 720 GPD = 262,800 gallons per year.
- Too close for comfort - You need at least 3,000 gallons of water storage, but more will give you more security.

Example Budget #3

- You draw water from a fish bearing stream.
- No water can be withdrawn from 5/15 to 10/15. You need 75,000 gallons of storage, unless you implement conservation.

Prevent Water Loss



To check for leaks, turn off the supply to your home and garden. If your meter is still running, find and stop your leak immediately. Install a float valve in your tank to prevent over-flow. Leave as much water as possible at the source.



Storing Water in the Land

You can increase water stored underground by use of bioswales on gentle slopes to create garden spaces that need less water, or to catch garden runoff. Out-slope your roads so they drain into vegetation to reduce stream siltation and increase infiltration.