# How to Use the Small Farm Dam Planning Tool

**This guide shows you how to access and use the Small Farm Dam Planning tool, with step-by-step instructions and annotated screenshots.**

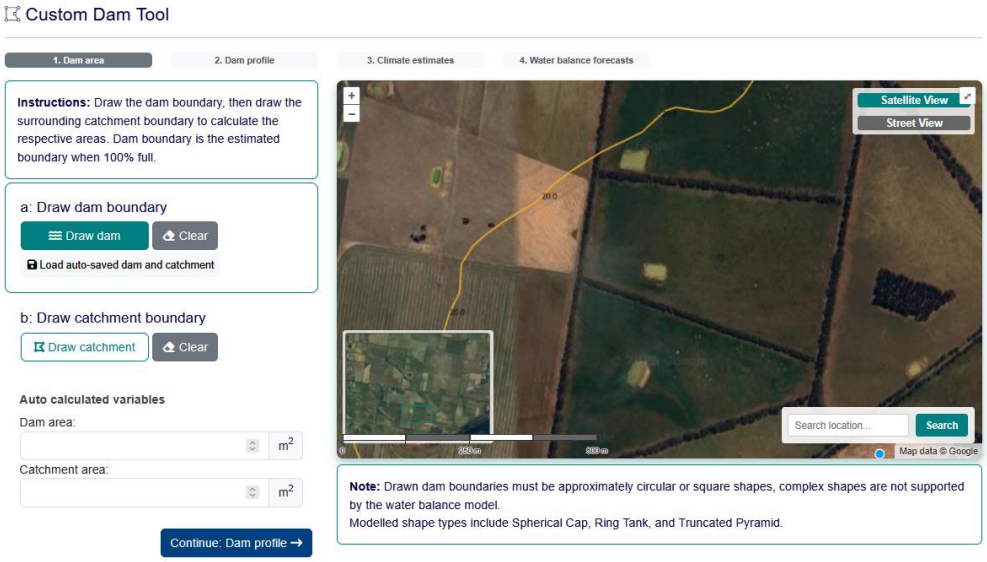
## 1. Accessing the Calculator

- Go to the project landing page (https://fdfdams.cerdi.edu.au/).
- Click the "Planning Tool" button/link.
- This opens the calculator in your browser.

## 2. Step-by-Step Instructions

### Step 1 – Identify Dam Location

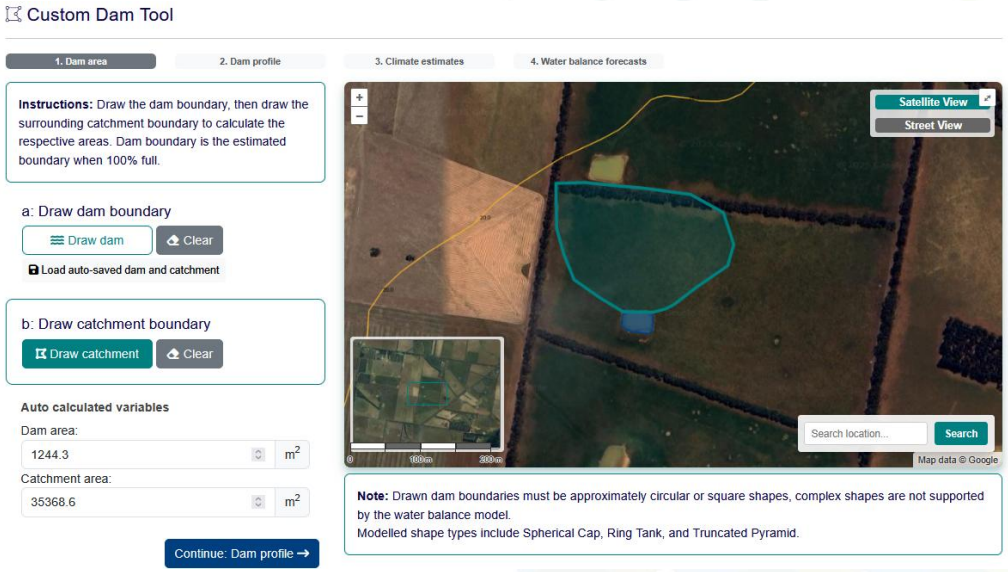
- Use the map to zoom to your farm.
- Place a marker on the dam site.




### Step 2 – Draw Dam & Catchment

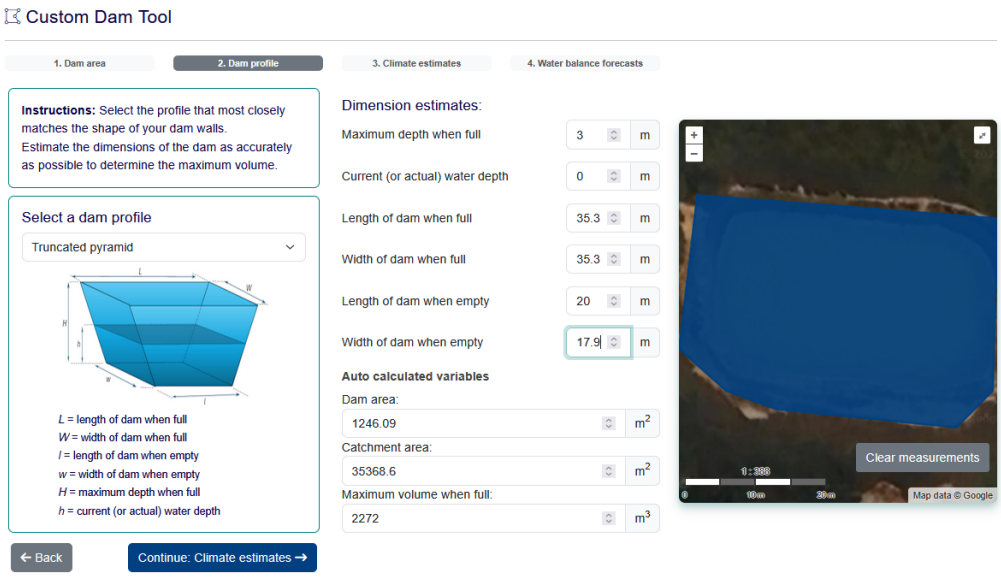
Draw dam surface area (when full) and watershed catchment. Dam area and catchment area are automatically calculated.

- Draw the outline of the dam surface area (when full).
- Draw the outline of the catchment area feeding into the dam.
- The calculator automatically estimates both areas.



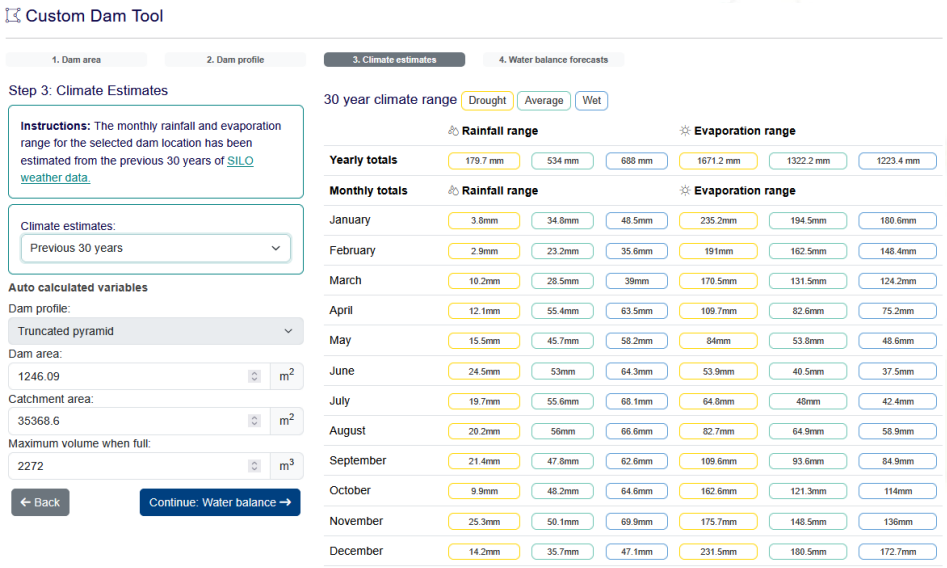
## Step 3 – Describe Dam Profile

- Input dam depth and side slopes.
- Select dam type if options are provided.



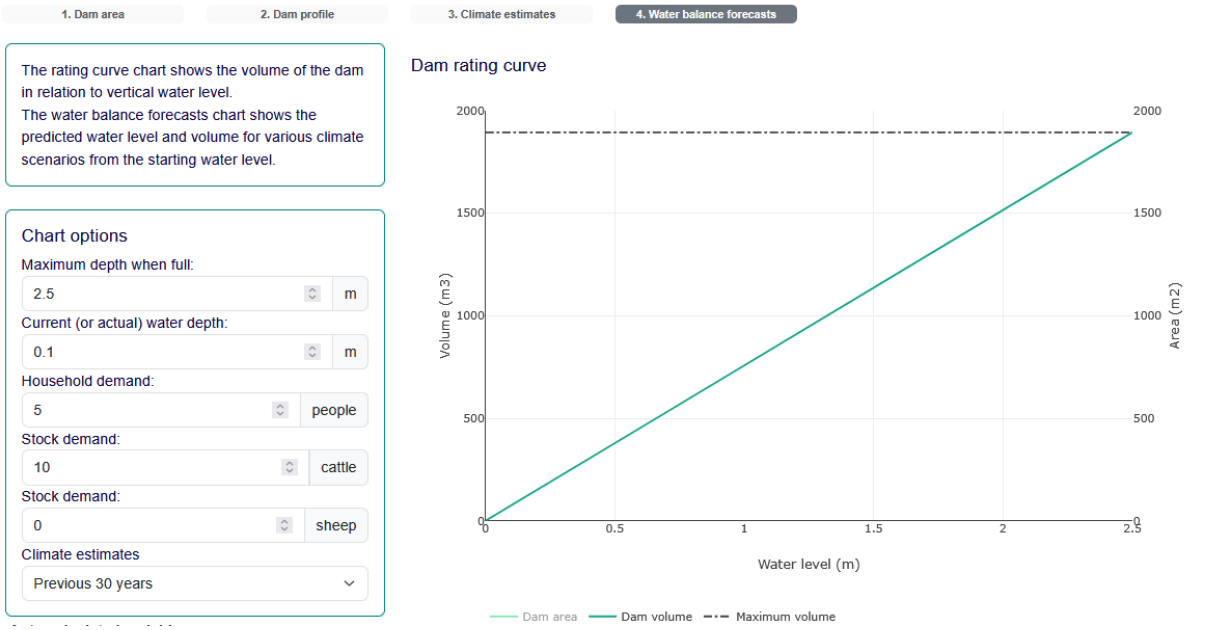

## Step 4 – Choose Climate Estimates

- Select a nearby weather station or regional climate dataset.
- This sets rainfall and evaporation estimates.



## Step 5 – Estimate Water Use

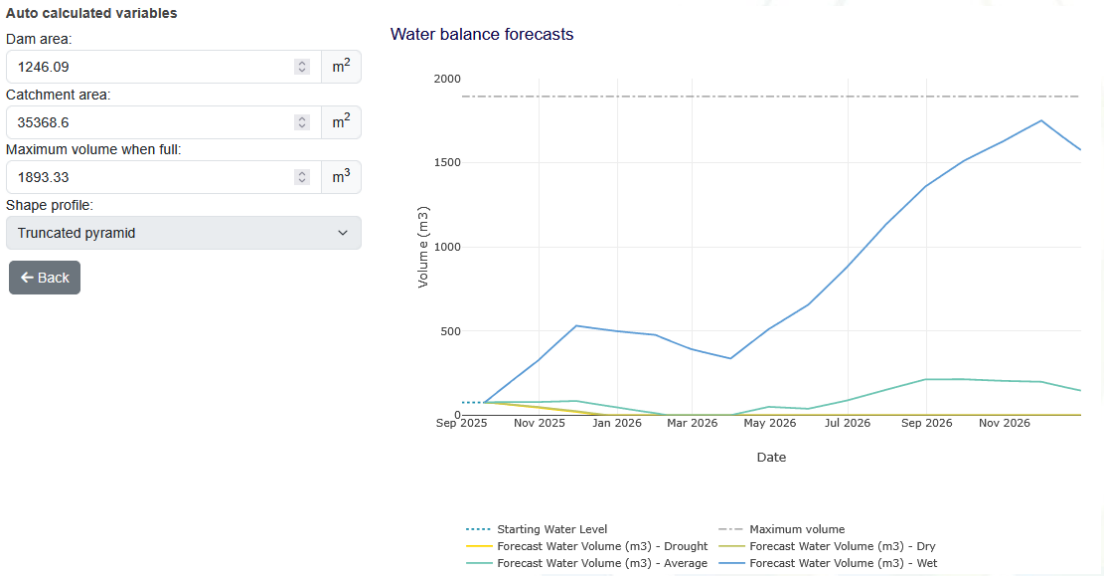
- Enter number of livestock and domestic water demand.
- The tool will estimate daily/annual use.




## Step 6 – Review Capture Likelihood

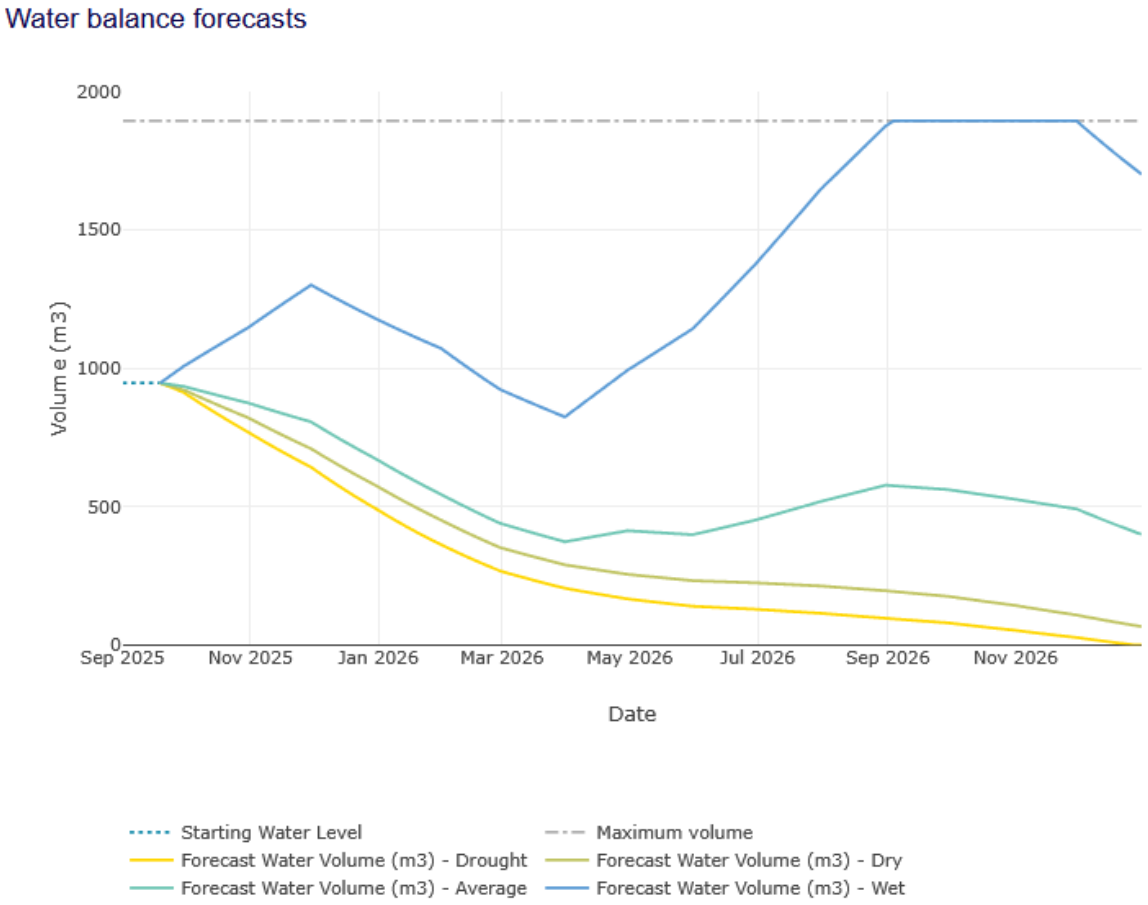
The tool models how often the dam will fill or dry under wet, average, and dry years. Examine likelihood of volume capture (in this example even in a wet year this dam will not fill if starting from dry. Example:

- Starting empty → dam unlikely to fill, even in wet year.



However if the dam was half full then the dam would overflow in a wet year, but decline in an average year and be totally dry in a drought. Example:

- Starting half full → dam overflows in wet year, but empties in drought year.




## 3. Tips from the developers

- Use the zoom/pan tools carefully to outline accurate catchments.
- Start with smaller catchments if drawing is difficult, then adjust.
- Compare different scenarios (e.g. half full vs empty) for resilience planning.
- Save/export results for future planning discussions.

**That's it! You can now estimate your dam's capacity, catchment inflow, and reliability to support water planning.**