



SENSOR LOCATION GUIDELINES

Sensor Technology



Divirod's sensors utilize GNSS-R technology to capture a multitude of water data and information. GNSS-R works as a passive radar solution, leveraging signals generated by orbiting navigation satellites.

Due to the unique nature in which we gather data, and the large area in which we can cover with only one sensor, the location of that sensor is critical to providing the most accurate, real-time data possible to our customers.

The guidelines below are helpful in identifying the best location to deploy your sensor(s).

Sensor Location Guidelines



Direction

SOUTH FACING (RECOMMENDED)

- Southern facing sensor locations allow us to capture reflected radar data from the GPS satellite constellation
- Provides largest set of reflected radar data, with greater frequency

NORTH FACING

- North Facing = Smaller and less frequent set of reflected radar data due to fewer satellites (opposite is true if located in the southern hemisphere).



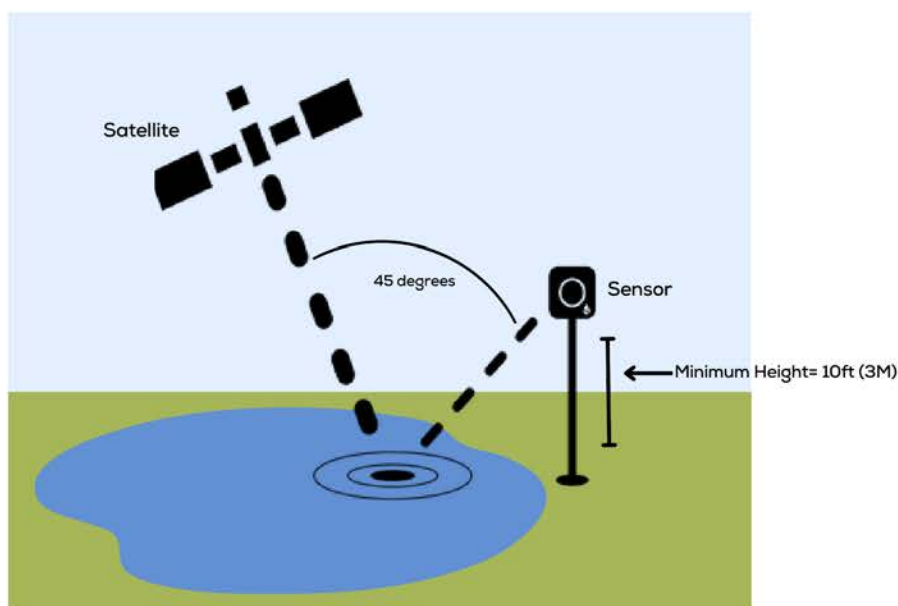
Field of View

The field of view of the sensor should be as unobstructed as possible to provide the highest level of accuracy and precision, without additional reflected radar data processing. Meaning, trees, buildings, or any other natural or man-made obstructions may affect data access and/or quality.

Sensor Location Guidelines (continued)

Stationary Installation/ Mounting Location

- Installation/Mounting location must be fixed throughout the data capture period
- Minimum installation height of 10 feet (3 meters) above the surface to be measured
- Increased height of installation provides increased capture/processing of reflected radar data
- Results in a greater area for analysis and data reporting.
- The area of interest to be measured should be less than 300 feet from the installation location, in general.
- Distance from the water and height of installation should allow for a 45 degree angle.



Power Source

- Uninterrupted connection
- 110v Outlet/Hardwired (grid power)
- OR Customer provided 12V solar system

Communications

- Cellular coverage (no WiFi)

Location Examples

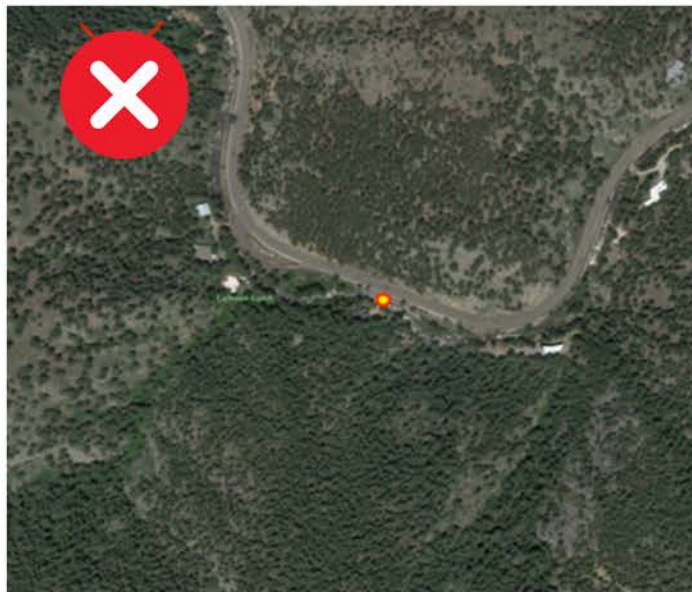
Location and installation examples are shown below for your reference. Each location is subject to Divirod's systems engineering review for optimal data collection.



Bad Location: Narrow river is below ground height with trees and tall buildings.



Bad Location: Narrow field of view with obstruction from thick tree cover and buildings.



Bad Location: Eastern field of view in a deep canyon.



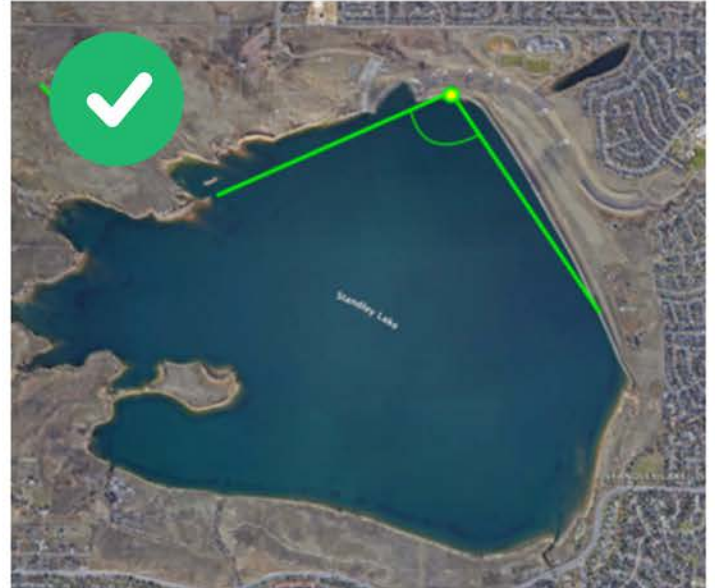
Bad Location: North facing view with spillway.

Location Examples

Location and installation examples are shown below for your reference. Each location is subject to Divirod's systems engineering review for optimal data collection.



Bad Location: Narrow river (7ft wide) with trees obstructing the view.



Good Location: Southern field of view to the water with no obstruction.



Good Location: Wide field of view to the water with no obstructions.



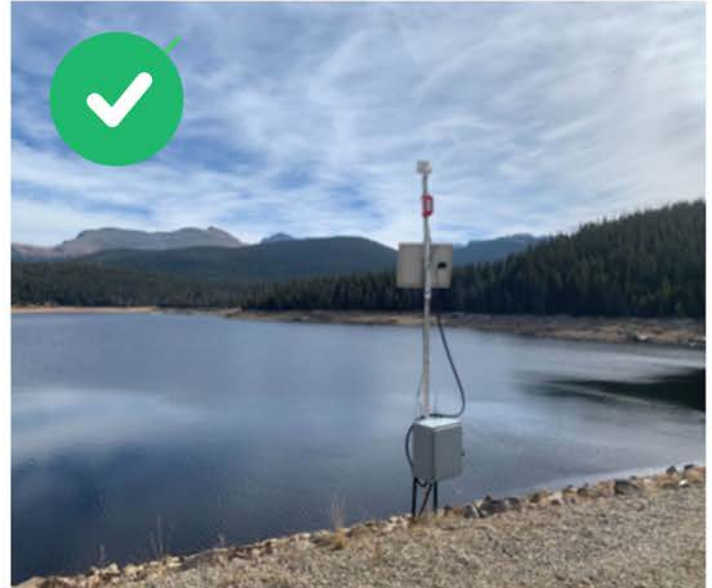
Good Location: Wide field of view to the water with no obstructions.

Installation Examples

Location and installation examples are shown below for your reference. Each location is subject to Divirod's systems engineering review for optimal data collection.



Good Installation: Clear field of view to the water with no obstruction.



Good Installation: Clear field of view to the water with no obstruction.



Bad Installation: Obstructions in the field of view of the water.



Bad Installation: Obstructions in the field of view of the water.

Installation Examples

Location and installation examples are shown below for your reference. Each location is subject to Divirod's systems engineering review for optimal data collection.



Bad Location: Good field of view, but too far from the water.



Good Location: Southern field of view to the water with no obstruction.