

WORKSHEET 1. ASSESS A CONNECTION TO GROUNDWATER



Use the following questions to assess whether iGDE polygons are connected to groundwater.	Yes	No	Insufficient Data
GENERAL QUESTIONS FOR ALL GDE TYPES			
Is the iGDE underlain by a shallow unconfined or perched aquifer that has been delineated as being part of a Bulletin 118 principal aquifer in the basin?			
Does depth-to-groundwater data from multiple years (e.g., 10-year average, wet/average water year periods) under the iGDE come within 30 feet from the ground surface? [For more details refer to " Identifying GDEs Under SGMA: Best Practices for using the NC Dataset "]			
Is the iGDE located in an area known to discharge groundwater (e.g., springs/seeps)?			
<p><i>If you answer Yes to any of the above questions, then you likely have a GDE. Stop here.</i></p> <p><i>If you selected No or Insufficient Data or cannot confidently answer any of the above questions, then answer the following questions to infer groundwater dependency.</i></p>			
RIVERS, STREAMS, AND ESTUARIES			
Is the iGDE located in a portion of a river or stream that is likely a gaining reach?			
Are water temperatures around the iGDE relatively constant over time, indicating a potential for gaining conditions?			
Are there stable/permanent natural flows detected by stream gauges near the iGDE, indicating a potential for gaining conditions?			
Is there water or flows around the iGDE during summer months?			
For iGDEs near estuaries, does the salinity drop below that of seawater in the absence of surface water inputs (e.g., surface runoff or stormwater)?			
Are the isohaline contour lines of the saline wedge relatively constant under an iGDE?			
WETLANDS			
Is the level of water around the iGDE maintained during extended dry periods without surface water inflow or management?			

Use the following questions to assess whether iGDE polygons are connected to groundwater.	Yes	No	Insufficient Data
Is the location of the iGDE consistently associated with known areas of groundwater discharge (e.g., springs or seeps) in terrestrial and/or coastal environments?			
TERRESTRIAL VEGETATION			
Does vegetation in the iGDE remain green and physiologically active during extended dry periods of the year?			
Does the iGDE have higher evapotranspiration rates in summer months compared to other nearby vegetation unlikely to be dependent on groundwater?			
SEEPS AND SPRINGS			
Are there breaks in the slope of the land surface or areas of stratigraphic change causing groundwater to emerge or vegetation to congregate on the surface?			
Is there a presence of hydric (very wet) soils in areas with little summer precipitation, indicating persistent soil saturation throughout the year?			
Are there elevated surface water temperatures from an influx of geothermal groundwater discharge?			
<p><i>If you answered Yes to any of the questions above, then you likely have a GDE.</i></p> <p><i>If you answered No to all the questions, then you likely do not have a GDE.</i></p> <p><i>If you answered Insufficient Data to all the questions, then assume you have a GDE until sufficient data is collected. Refer to Appendix IV and Step 4.</i></p>			