

**Information Need No. H-14**

**ER Section 4.2.1**

**Request:**

Provide a knowledgeable expert who can identify the extent of the offsite zone of impact to groundwater caused by construction and dewatering activities, and who can relate groundwater impacts to possible impacts on wetlands and offsite wells.

**Knowledgeable Expert:**

A knowledgeable expert was provided.

**Response:**

A knowledgeable expert will be available at the audit meeting to support the discussion of potential impacts to wetlands due to construction and dewatering activities. ER Section 2.3.3 discusses surface and ground water uses that could be affected by construction.

Section 2.3.2.2.9 specifically addresses ground water impacts due to construction-phase dewatering of the glacial overburden aquifer in the power block and UHS pumphouse areas in order to excavate down to bedrock. It describes the protective benefits of the groundwater flow barriers that will be installed around these areas in order to minimize seepage into the excavations, minimize impacts to the glacial overburden aquifer outside of the excavation area, and maximize the stability of the excavation sidewalls. Because the groundwater flow barrier will be installed prior to excavation, the amount of groundwater that needs to be pumped and the resulting impacts to the shallow aquifer will be temporary and minimal. Because groundwater will not be pumped and will not be used in the plant during operation, this section concludes that long-term impacts on groundwater levels, flow directions, and resources resulting from construction and operation of the BBNPP will be small and localized (within less than a 1,000-ft radius of the plant).

ER Section 4.2.1.5 includes a discussion of construction impacts to wetlands and existing surface water bodies. In addition to the temporary dewatering for construction of the power block and UHS pumphouse discussed above, this section also discusses potential impacts to existing surface water bodies and wetlands. Section 4.2.1.6 identifies the nearest permitted, down-gradient groundwater well as being located approximately 1.7-mi from the center of the BBNPP site. Since the groundwater impacts associated with dewatering are localized, as described above, the potential for impact to the nearest offsite well and other offsite wells are expected to be minimal. Likewise, potential impacts to offsite wetlands would be minimized, especially taking into consideration the proposed practices to limit or minimize hydrologic alterations described in ER Section 4.2.1.7.

**References:**

**Public**

BBNPP COLA ER Sections 2.3.2 and 2.3.2.2.9  
BBNPP COLA ER Sections 4.2.1.5, 4.2.1.6, and 4.2.1.7

**Internal**

None