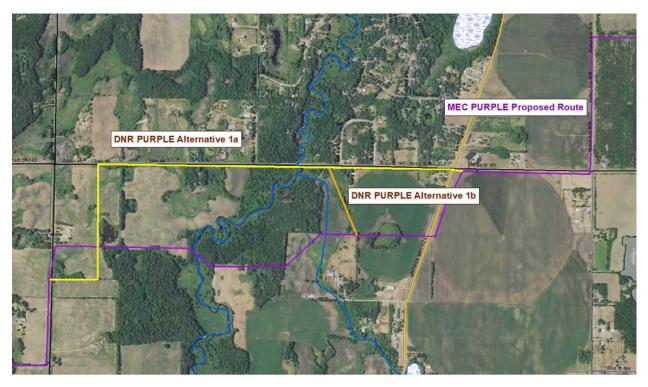
# MN Energy Connection – DNR Proposed Route Alternatives Purple Route Alternatives (North to South)

# **DNR PURPLE Alternative 1**



The proposed Purple Route option would cut new right-of-way (ROW) through forested areas within shoreland of the Clearwater River (M-071), a public watercourse, and through the designated floodway and 100-year floodplain. Even though the Purple Route option proposes to cross at a narrow point in the river, this is still fragmenting habitat and opening up this corridor to ongoing maintenance issues from erosion, either directly to pole structures, or by removing trees that currently provide stability within the floodway. We also oppose further fragmenting what little intact forest remains in Wright County and Stearns County, which are heavily dominated by agriculture.

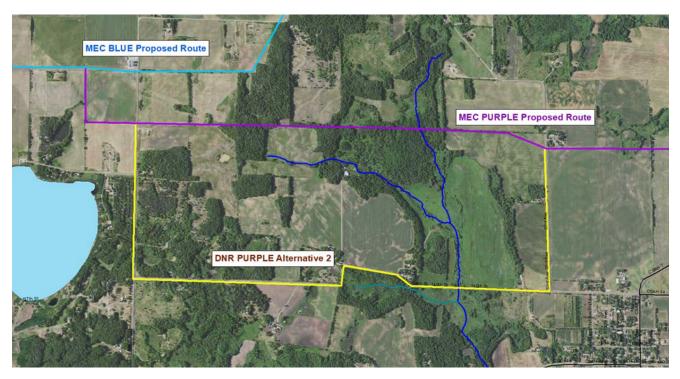
# **DNR PURPLE Alternative 1a**

DNR PURPLE Alternative 1a continues west on 160th Street NW/ County State Aid Highway (CSAH) 46 to cross Clearwater River over the existing bridge and extends further south to reduce the number of turns in the route. This route avoids impacting residential structures along CSAH 44, before reconnecting to proposed Purple Route option.

#### **DNR PURPLE Alternative 1b**

DNR PURPLE Alternative 1b follows the proposed Purple Route option even further than DNR PURPLE Alternative 1a, and angles northwest to connect and follow the rest of DNR PURPLE Alternative 1a. This is our preferred alternative for this section of the Purple Route option because it avoids residences along 160th Street NW/ County State Aid Highway (CSAH) 46, while minimizing wetland, shoreland, and floodplain impacts by crossing the Clearwater River at the existing bridge.

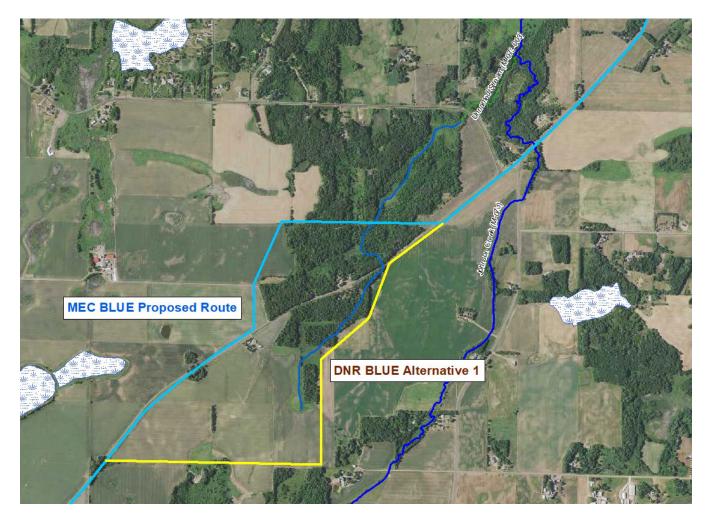
# **DNR PURPLE Alternative 2**



The proposed Purple Route option crosses directly over Fairhaven Creek, a designated trout stream. It is important that tree canopy be maintained over cold water habitats, such as trout streams, and in our early coordination letter, we emphasized protecting trout streams and selecting routes that do not further fragment habitat within a landscape heavily dominated by agriculture. We strongly advise avoiding disturbance to this stream, which is sensitive to sedimentation as well as temperature changes. If the trout stream must be crossed, it should be done so using an existing bridge crossing. This alternative proposes to cross the stream using the existing 140th Street bridge. Please note that DNR BLUE Alternative 2 is another alternative that avoid impacts to the trout stream.

# **BLUE Route Alternatives (North to South)**

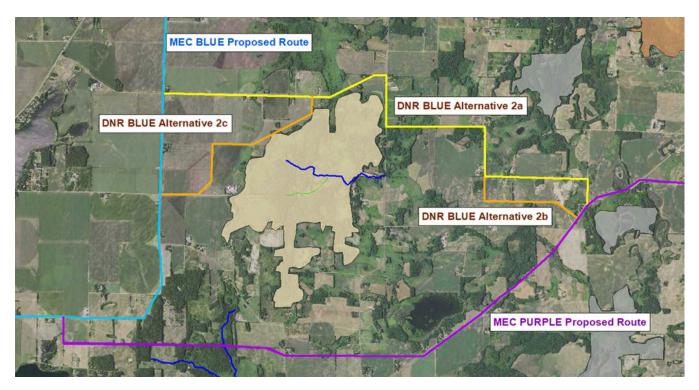
## **DNR BLUE Alternative 1**



The proposed Blue Route option crosses directly over Johnson Creek, a designated trout stream as well as a DNR public watercourse (M-073-003). It is important that tree canopy be maintained over cold water habitats, such as trout streams, and in our early coordination letter, we emphasized protecting trout streams and selecting routes that do not further fragment habitat within a landscape heavily dominated by agriculture. If the route must cross a designated trout stream, DNR would prefer that selected route cross Johnson Creek (M-073) following an existing road and bridge crossing. The Blue Route option proposes to cut a new ROW through shoreland in a forested area that provides tree canopy and cover to a headwaters stream that flows into Johnson Creek, a designated trout stream. If the route cannot continue along the existing road, then we would prefer that it avoid fragmenting the forested area any further by cutting a corner south of County Road 142 through agricultural fields.

The DNR BLUE Alternative 1 avoids residences, tree clearing within shoreland, habitat fragmentation, additional stream crossings, and impacts to pivot irrigation systems. We recommend a 300 feet ROW starting at the western tree line and extending east to find the best route to avoid all tree removal and stream impacts while also avoiding pivot irrigation infrastructure.

# **DNR BLUE Alternative 2**



Route options through this part of Stearns County are highly constrained due to the presence of designated trout streams, MBS Sites of Biodiversity Significance, public waters, stretches of intact wildlife habitat, migratory corridors, residences, and pivot irrigation systems. The DNR BLUE Alternative 2 route proposes another way to avoid impacts to Fairhaven Creek, a designated trout stream, to the south by diverging from the proposed Purple Route option farther east and cutting across to the west along existing roads and through agricultural fields in order to avoid the MBS Site of Biodiversity Significance, wetlands, and tree clearing, before joining the proposed Blue Route option.

## **DNR BLUE Alternative 2a**

DNR BLUE Alternative 2a closely follows existing roads by turning north onto 170th Street, then west onto 165<sup>th</sup> Street, and north again on 33rd Avenue, then west on 170th Street, and north onto CSAH 7. The alternative follows Dellwood Road to the west until it rejoins the proposed Blue Route at 66th Avenue. We proposed a 300 feet ROW for this alternative to allow for locating the route on either side of the road to avoid impacts to residences.

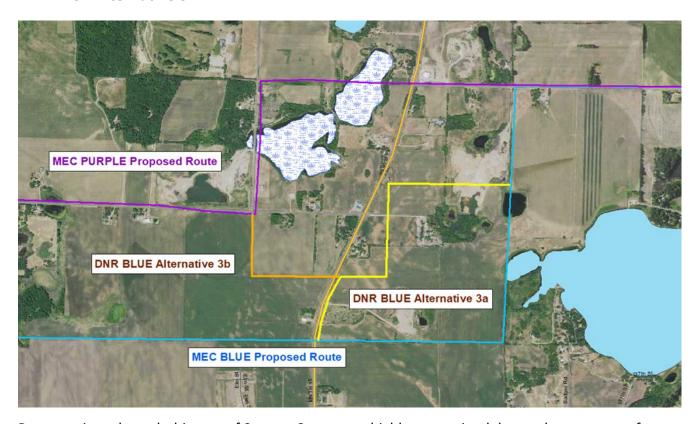
#### **DNR BLUE Alternative 2b**

DNR BLUE Alternative 2b turns northwest and away from the proposed Purple Route just past 170th Street through agricultural fields in order to avoid impacting residences located along 165th Street, then follows the rest of DNR BLUE Alternative 2a. This alternative, in combination with DNR BLUE Alternative 2c, is our preferred alternative for this section of the Blue and Purple route options because it avoids more residences while minimizing wetland, shoreland, and floodplain impacts to Fairhaven Creek.

## **DNR BLUE Alternative 2c**

DNR BLUE Alternative 2c follows DNR BLUE Alternative 2a, but then turns south from Dellwood Road and angles through agricultural fields while avoiding pivot irrigation infrastructure in order to avoid impacting residences located along Dellwood Road. This alternative rejoins the proposed Blue Route option at 163rd Street. This alternative, in combination with DNR BLUE Alternative 2b, is our preferred alternative for this section of the Blue and Purple route options because it avoids more residences while minimizing wetland, shoreland, and floodplain impacts to Fairhaven Creek.

# **DNR BLUE Alternative 3**



Route options through this part of Stearns County are highly constrained due to the presence of designated trout streams, MBS Sites of Biodiversity Significance, public waters, stretches of intact wildlife habitat, migratory corridors, residences, and pivot irrigation systems. Both the proposed Purple and Blue route options converge briefly in this area north of School Section Lake, a DNR public water basin. The proposed Blue Route option runs directly along the west side of the basin, posing a hazard to migratory birds that use the lake.

The Purple Route option continues west and avoids the School Section Lake, but directly crosses two DNR public water wetlands, dissecting a wildlife corridor. DNR BLUE Alternative 3 proposes a route that would enable both of the proposer's route options to avoid impacts to public waters and minimize impacts to migratory birds by increasing the route's distance from the public waters. Both alternatives attempt to minimize impacts to residences and pivot irrigation infrastructure.

## **DNR BLUE Alternative 3a**

DNR BLUE Alternative 3a proposes that both the Blue and Purple route options continue together along the proposed Blue Route option and then turn west just before reaching the wetland to the north of School Section Lake. There is currently a mining operation in this location, however it appears from aerial imagery that the southern portion of the mining is complete and has been restored to agriculture. Therefore, DNR recommends crossing the southern portion of the mining operation that has been completed. We recommend a 500 feet ROW over the mining parcel to find the best way to avoid impacts to the mine. This alternative crosses through agricultural fields avoiding pivot irrigation while maximizing the distance to residences until it reaches MN Trunk Highway 15 and turns south to rejoin the proposed Blue Route option.

## **DNR BLUE Alternative 3b**

DNR BLUE Alternative 3b follows the DNR BLUE Alternative 3a route, but instead of turning south at MN Trunk Highway 15, crosses it and continues west to meet up with the Purple Route option. This alternative completely avoids the impacts to the two public water wetlands to the north as well as residences and pivot irrigation infrastructure.