Appendix 7

Description of Watershed Protection

The watershed area formed by the DF dam impoundment extends approximately 4 miles north from the DF dam to the tailrace of the McIndoes plant. A 200 foot boundary area would encompass approximately 90 acres. The river is paralleled by paved highways and, on the Vermont side, by interstate 91. The steep banks and rock outcrops between the Dodge Falls dam north to McIndoe Falls, provide for little developable land and there are only a few homes and farm buildings, none near the river’s steep shoreline on the west by interstate highway 91 (see Appendix 7-1). All of this land other than in the immediate vicinity of the DF dam is privately owned. The east bank of the river at the Dodge Falls Dam includes steep banks, rock outcrops, and, downstream from the dam, a rock and sand shoreline. By its nature, the watershed area naturally protects fish and wildlife habitat by its topography and lack of public access.

In the immediate vicinity of the project site, forests cover terrace slopes and upper portions of ledges, while sparse communities of plants, primarily annuals, are found on the narrow strip of exposed rock and the sand/rock shoreline of the river. Between McIndoe Falls and Monroe, about 4 miles upstream of the DF facility, and Wells River and Woodsville, 4.6 miles downstream, the land on both sides of the river is relatively undeveloped except for the village and mill at East Ryegate adjacent to the dam. (See satellite image in Appendix 7-2)

The flows below the DF facility have minimal effect on shoreline erosion due to the predominantly cobble and boulder substrates in the tailrace areas. There has been minimal colonization of exposed shorelines by emergent plants within the 200 foot boundary area due to the inhospitable steep banks, rock outcrops and sand shoreline.

Layout and landscaping of the powerhouse grounds was designed in a manner to minimize visual impact and mitigate the project’s impact on the surrounding shoreline. The powerhouse is a low profile structure only 20-25 feet above dam crest and only 15 feet above the parking area. The parking area was screened from the river by trees, and disturbed sites were planted to native trees and shrubs. Areas of shoreline and steep banks, particularly those downstream from the dam were flagged and protected during construction.

As a condition of issuance, the FERC Exemption requires compliance with any terms and conditions that the Federal or State fish and wildlife agencies have determined appropriate to prevent loss of, or damage to, fish and wildlife resources. There have been no deficiencies noted by any agency with jurisdiction for the DF plant.