State of Vermont
Water Resources Board

RE: Poultney River
Outstanding Resource Water
Docket No. 90-01

Authority 10 V.S.A. § 1424a

Finding of Fact, Conclusions of Law and Order

On February 14, 1991, the Water Resources Board (Board) conducted a hearing on the petition to have the Poultney River, from the Poultney/Fair Haven town line to Lake Champlain (Lower Poultney River), designated as an Outstanding Resource Water (ORW). The evidence in the record convincingly demonstrates that all portions of the Lower Poultney River should be designated as ORWs, pursuant to 10 V.S.A. § 1424a, because they have exceptional natural, cultural, and scenic values.

Findings of Fact

1. The waters for which designation is sought are the mainstem of the Poultney River beginning at the Poultney/Fair Haven town line and continuing to the headwaters of Lake Champlain, referred to as the "elbow" (Lower Poultney River).

2. The petition itself, was submitted by the Poultney River Citizens Committee (River Committee) and the Agency of Natural Resources (ANR), was admitted into the record without rebuttal or challenge.

3. No party opposed designation of the Lower Poultney River as an ORW. Two parties gave oral and/or written testimony describing existing uses of the Lower Poultney River for hydropower generation and irrigation but did not take issue with the evidence that the Lower Poultney River has exceptional values. All other testimony supported the designation.

Natural Values

4. The Lower Poultney River has exceptional natural values that merit designation. Many of the species, identified below, are protected under State and/or Federal law. Unless otherwise noted, "endangered" or "threatened," in these findings of fact, refers to its State status.

5. Approximately fifteen miles of this river segment runs through wood ravines, alluvial forests and extensive wetlands.

6. The Poultney River has an extensive vegetated buffer. Approximately 90% of both river banks are naturally vegetated. The wooded areas and marshlands associated with the river provide dense natural buffers.
7. Carver Falls hydroelectric dam is the only river impoundment on the Poultney River and it has existed since 1894. (See Exhibit #2). Over the years, the generating facilities at the Carver Falls site have been upgraded and currently tie into Central Vermont Public Service Corporation's subtransmission grid, to the benefit of all its electrical consumers. The only structure within close proximity to the lower river corridor is the power house at Carver Falls. Four roads and a railroad track cross the river.

8. The Poultney River provides exceptional aquatic habitat. There is a wide variety of fish habitat found in the Poultney River, ranging from high velocity riffles with rubble substrate to slow moving pools with sand substrate, to seasonally inundated wetlands. The Poultney River's fish community is the most diverse identified in a river in Vermont at this time.

9. The Poultney River contains a highly diverse ecosystem. The richness of the biotic community in the lower river benefits from the river's connection with Lake Champlain. Recent fish surveys below Carver Falls found 28 of the 87 fish species (32%) known to occur in the state of Vermont. When species found above Carver Falls and in the tributaries are included, the list goes to 43 of 87 (49.4%). If historic surveys are included, the list exceeds 55% of all fish species known to occur in Vermont.

10. The Poultney River harbors twelve species of fresh water mussels, representing 70% of the total species diversity known to occur in Vermont. This mollusc community is highly diverse and is one of only two of its kind currently known in Vermont. Some of the rare mussels found in the Poultney River include the pink heelsplitter, the fragile papershell, and the black sandshell.

11. The Poultney River/East Bay is an important spawning area for walleyes from Lake Champlain. It is presently the only tributary to Lake Champlain in Vermont that has a walleye spawning run which is large enough to be used as an egg source for the Lake Champlain Fry and Fingerling Project. There is a naturally reproducing population of brown trout which exists above Carver Falls.

12. The Poultney River has exceptional wildlife habitat. Much of the land bordering the river remains in woods or wetlands. The river corridor has an inherent balance and a healthy diversity of flora and fauna. The river-wetland-forest complex provides extensive "edge" habitat supporting large numbers and diversity of birds (including nesting and migratory), mammals, reptiles, amphibians, and plant communities.
13. The Poultney River watershed encompasses an array of natural communities, including floodplain forest, oak-hickory-forest, rich northern hardwood forest, birch-beech-maple forest, emergent marsh, hardwood-cedar swamp, shrub swamp, calcareous outcrop, and talus slope. The variety of natural community types and level of species diversity in the Poultney River drainage is exceptional on a statewide basis, and is comparable to, if not greater than, other rivers of similar size in Vermont.

14. A heavily vegetated riparian buffer strip provide the protective cover necessary for wildlife to move freely to feeding, nesting or denning sites. A state-identified deer yard is associated with and lies adjacent to the Poultney River in West Haven.

15. Large and diverse wetland types lie adjacent to and are interdependent with the Poultney River in Fair Haven and West Haven, including Cemetery Cedar Swamp, Cogman Pond, Billings and Reed Marsh, Corriscaden Marsh, Schoolhouse Marsh, Blue Hole, and Steves Marsh.

16. Below Carver Falls there are several types of uncommon or rare bird species known to nest within the riparian zone of the river. These include, the Pied-billed Grebe (rare), the Common Moorhen, the American Bittern, the Golden-winged Warbler, the Least Bittern (rare), the Grasshopper Sparrow (rare), and the Blue-gray Gnatcatcher. The following rare birds are known to utilize the habitat in the Poultney River corridor: the bald eagle (endangered), and the prothonotary warbler.

17. The stinkpot (musk turtle), map turtle (uncommon), timber rattlesnake (endangered), black rat snake, and five-lined skink (endangered), represent uncommon or rare reptiles which have been found in or adjacent to the Poultney River.

18. The following uncommon or rare fish have been identified below Carver Falls: bridal shiner, blackshin shiner; silver redhorse; eastern sand darter (threatened); and channel darter.

19. The Poultney River corridor contains the following rare or uncommon Vermont plant species: Wall Rue Aplenium; Slender Cliffbrake; Branching Bur-reed (rare); Green Dragon (threatened); Yellow oak; False pimpernell; Yellow water crowfoot (rare); and Pignut hickory.

20. A number of rare or uncommon plant species grow in the cedar swamp located in Fair Haven which is classified as a hardwood northern white cedar swamp. The rare or uncommon plant species include the following: Yellow Bartonia (rare); False Cyperus (rare); Thin-flowered sedge (rare); Showy Lady’s slipper; and Small yellow Lady’s slipper.
21. The Poultney River has unique geologic features. The bedrock geology in the Fair Haven area provides important insight into the geologic history of Vermont. In particular, the outcrops along the Poultney River, from West Street to Carvers Falls, provide critical information on the geologic history of Vermont. There are six exceptional geological features on the Poultney River.

a. the "slide:" Slate outcroppings that are smooth and have a drop in elevation over an extensive area. In medium and low water, all of the water is contained in this long chute or slide.

b. "ranneys rocks" including (1) mud turbidities and (2) boudinage structures; (a) Large glaciated outcrop of light gray, greenish gray and reddish tan slate with thin bands of white chert; (b) Compacted carbonate mud layers.

c. "layered cliffs." Layered cliffs at the confluence of Mud Brook have remnants of pebble/cobble glacial till.

d. "Poultney River folds/deep sea fan." These northernmost outcrops reveal millions of years of geologic history.

e. "Carver Falls." Carver falls is the highest major falls in Vermont and is composed of two large falls at the head of a limestone gorge. The falls is one of the best examples of this kind of gorge in Vermont.

f. "Limestone-type Cliffs." The cliffs in Vermont are part of the Danby and Potsdam formations. These cliffs are some of the richest in Vermont for limestone loving ferns.

Cultural Values

22. The Lower Poultney River has exceptional cultural values which merit designation.

23. Due to the existence of the intact archeological sites along the Poultney River that relate to many different cultural groups that lived, invaded or survived in this part of Vermont, the Poultney River is an unusual and outstanding archeological resource. The potential for additional prehistoric and historic archeological sites to exist on the Poultney River is extremely high. There are a number of known prehistoric sites on the Poultney River, including the following:

a. Rock Shelters. The Poultney River Cave and the nearby Bunker Farm Rockshelter site were found by Theodore Sherman, and were described for American Antiquity.
24. Known historic sites on the Poultney River include:

a. **The Shipwreck "Linnet"** is evidence that this river was used during the French and Indian War and the War of 1812. This sunken boat is on the National Register of Historic Places.

b. **The Hessian Road and Landing Place.** Approximately 3000 Hessian soldiers, during the Revolutionary War, crossed the Poultney River and encamped on Hessian Bowl Hill for three weeks.

c. **Covered Bridge.** Evidence of an old covered bridge destroyed in the 1927 flood is still present.

d. **Carver Falls Cemetery.** This old cemetery has a headstone from 1788, and General Jonathan Orme was buried here in 1850.

e. **Carver Falls Powerhouse.** This stone powerhouse was built in 1894. Originally the Carver Falls area was expected to be the center of town when West Haven and Fair Haven were one town. The town was divided in 1792 and the center of the two towns were located elsewhere.

25. Other remnants of Vermont's industrial past have been found near the Poultney River, including the Gamaliel Leonard Forge (one of the earliest Vermont ironworks), an unused Colburn furnace and the Carver Falls mill sites.

26. The Poultney River which has been the center of human activity in the past, offers tremendous opportunities to explore and understand our natural and cultural history.

27. The geologic features of the river are readily accessible to the public and actively used and studied by universities from throughout New England including Middlebury College Geology Department, and Castleton State College.

28. The archeological and historic sites associated with the Poultney River offer tremendous research potential. Cave sites associated with the Poultney River have been used by Poultney High School social science classes. The Hessian road and landing have been studied extensively by an independent historian. Also, the State Division of Historic Preservation highly values the research potential of unique Poultney River cultural history sites that are well-preserved.
29. Poultney River is part of the Champlain-Adirondack Biosphere Reserve. The Champlain-Adirondack Biosphere Reserve is the fourth largest such reserve in the world. It is under the auspices of UNESCO's Man and the Biosphere Program and encompasses 10,000,000 acres of land and water in New York and Vermont.

Scenic Values

30. The Lower Poultney River has exceptional scenic values which merit designation.

31. The river corridor is formed by trees and shrubs along the river banks and directs the viewer's eye to the scenic aspects of the river and its immediate environment. The Lower Poultney River is unique among the lowland segments of major Lake Champlain tributaries for the length and width of this undeveloped, naturally vegetated corridor. The canoeist travels long distances through a "tunnel" of maple trees, over-canopied with taller cottonwood trees. Part of the scenic, recreational opportunity is the feeling of isolation in the natural world that is also unique for visitors along Vermont rivers.

32. Breaks in the trees along the Poultney River provide a dramatic shift in the scenic experience from one of riverine detail and enclosure to one of expansive landscape views outside the river's immediate environment. The lower river from Carver Falls to South Bay is exceptionally scenic. The ravine below Carver Falls has riverside cliffs and is one of the few examples of a recessional limestone gorge in the state. Below the gorge there are fine viewsheds of the surrounding hills and valley, and the spectacular landscape where the river circles Austin Hill and enters South Bay.

Recreational Values

33. Game fish diversity below Carver Falls and the isolated setting combine to make the Poultney River a favorite destination of local anglers. It is enjoyable for anglers of varying skills.

34. Most accounts of the Poultney River are from the perspective of the canoeist. While it is not the only way to access the river, it is the method of choice for recreationists and naturalists. The ledges of the upper segment are a challenge to experience paddlers and the flatwater of the lower segment invites paddlers of all skill levels. The boating experience of the entire Lower Poultney River is outstanding due to the long season, visual interest, and exceptional privacy and naturalness of the river.
35. Naturalists and school groups use the Poultney River for wildlife observation and study of unique natural communities. VINS, The Nature Conservancy, the Pember Museum, and others use the river for group educational and recreational purposes. The great diversity of plants, animals and habitats associated with the Lower Poultney River provide for exceptional wildlife observation.

36. Although the Poultney River provides for exceptional canoeing for those seeking privacy and wildlife observation, and the river is important for its diversity of game fish, especially below Carver Falls, the evidence before the Board is insufficient to conclude that the Poultney River has exceptional recreational values that merit designation.

37. The Poultney River, as described in the petition, has exceptional natural, cultural and scenic values.

Conclusions of Law

Under 10 V.S.A. § 1424a the Board is vested with the authority of determining whether particular waters should be designated as outstanding resource waters. 10 V.S.A. § 1424a (a). The Board is required to designate the waters as outstanding resource waters if the Board finds that the waters "have exceptional natural, recreational, cultural or scenic values." 10 V.S.A. § 1424a (e) (emphasis added). After a public hearing and upon consideration of the evidence, the Board must designate the waters as outstanding resource waters if the Board finds that the waters in question are exceptional for any one of the four values listed in subsection "e."

The statute also provides a series of fourteen items that the Board may consider in making its decision. 10 V.S.A. § 1424a (d). This list of fourteen factors is not intended to be exhaustive. The statute directs that the Board "may consider, but shall not be limited to considering the following" fourteen items. Id. However, the inquiry is not limitless. The Board can not consider irrelevant or immaterial evidence. 3 V.S.A. § 810. There is no indication that the Legislature intended the Board to make findings under these considerations as if they were criteria, rather they provide guidance as to the nature and breadth of the inquiry intended by the legislature. Therefore, the findings have been organized under the hearings of the four values listed in § 1424a (e) - natural, recreational, cultural, and scenic. Findings relating to the fourteen considerations, if applicable, have been subsumed under the four more general headings.
Order

The waters of the Poultney River are exceptional for their natural, cultural, and scenic values, and are accordingly outstanding resource waters.

Dated at Montpelier, Vermont, this 28th, day of June, 1991.

Water Resources Board

Elaine B. Little, Vice-Chair

Mark DesMeules, Member

Jonathan Lash, Member