Petition to the
Maine Board of Environmental Protection
Requesting a Public Hearing to Consider
Modification of Maine Water Quality Certificates at
Androscoggin River and Little Androscoggin River
Hydroelectric Dams to Provide Immediate
Safe Passage for the American Eel.

(Brunswick, Pejepscot, Worumbo, Lewiston Falls, Upper Androscoggin, Deer Rips, Gulf Island, Livermore, Otis, Jay, Riley, Rumford Falls, Barker Lower Mills, Barker Upper Mills, Hacketts Mills, and Marcal hydroelectric projects.)

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11 Street v. Board of Licensing of Auctioneers, 2006 ME 6, ¶8.
12 White v. Zela, 1997 ME 8, ¶3, 687 A.2d 645, 646.
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STATE ADMINISTRATIVE ACTIONS

1 Maine BEP. Feb. 2, 2006. Findings of Fact and Order Dismissing Petitions of Friends of Merrymeeting Bay and Douglas Watts for Ch. 2 §27 Public Hearing.
2 Maine BEP. Sept. 21, 2005. Findings of Fact and Order Approving Water Quality Certification Order for the Gulf Island and Deer Rips Dams, Androscoggin River.
3 State of Maine. Feb 6, 2004. Respondent's Brief, S.D. Warren Company v. Maine Dept. of Environmental Protection. Maine Superior Court. Docket No. AP-03-70.
4 Maine BEP. October 2, 2003. Findings of Fact and Order Denying Appeal of S.D. Warren Company of Water Quality Certificates for Presumpscot River Dams.
5 Maine BEP. April 2003. Findings of Fact and Order Approving Water Quality Certifications for the Presumpscot River Dams.

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1 State of Maine. State of Maine's Respondent's Brief to writ of certiorati of S.D. Warren Company in re: S.D. Warren v. Board of Environmental Protection. No. 04-1527.
2 Friends of Presumpscot River & American Rivers. Respondents' Brief to writ of certiorati of S.D. Warren Company in re: S.D. Warren v. Board of Environmental Protection. No. 04-1527.
3 Solicitor General of the United States. Amicus Curiae Brief of the United States of America in Support of Respondent State of Maine. No. 04-1527.
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5 Allan, J.D. *et al*. Amicus Curiae Brief of Water Quality and Riverine Scientists in Support of Respondent Maine Board of Environmental Protection. No. 04-1527.
6 National Wildlife Federation *et al*. Amicus Curiae Brief of National Wildlife Federation *et al*. in Support of Respondent Maine Board of Environmental Protection. No. 04-1527.
7 Trout Unlimited *et. al*. Amicus Curiae Brief of Trout Unlimited *et al*. in Support of Respondent Maine Board of Environmental Protection. No. 04-1527.

EVIDENTIARY EXHIBITS

EXHIBIT ONE --Scientific and administrative documents pertaining to the Androscoggin River.

 a. Maine Dept. of Inland Fisheries & Wildlife database files documenting presence of American eels in various portions of the Androscoggin River drainage.

 b. Maine Dept. of Marine Resources annual fishway reports for the Brunswick Dam, Androscoggin River.
 c. Minutes of annual agency consultation meetings for Worumbo and Pejepscot dams.

EXHIBIT TWO --Photographs showing effect of turbine passage on migratory fish of the Kennebec River drainage, 1999 -2004 and photographs of typical hydroelectric turbines and aerial photographs of the subject Androscoggin River dams.

EXHIBIT THREE --Documents and Scientific Reports regarding the population status and threats to the American eel in Maine and the United States.

 a. July 6, 2005 Federal Register Notice announcing 12-month Status Review of the American eel pursuant to the U.S. Endangered Species Act.
 b. November 12, 2005 Petition for Listing the American eel as an Endangered Species pursuant to the U.S. Endangered Species Act.
 c. March 10, 2004 announcement of Atlantic States Marine Fisheries Commission regarding declining American eel stocks.
 d. "Worldwide decline of eel resources necessitates immediate action." December 2003 edition of Fisheries magazine. American Fisheries Society.
 e. Keynote Presentation of Boyd Kynard, S.O. Conte Anadromous Fish Research Center. Review of Migration, Research Methods and Passage for Downstream Migrant Fishes in the Northeast USA in Downstream Movement of Fish in the Murray-Darling Basin. Canberra Workshop. Canberra, Australia. June 2003.
 f. Report of the ICES/EIFAC Working Group on Eels. ICES Headquarters, 28-31 August 2001.
 g. American Eel White Paper. The Decline of American Eel (*Anguilla Rostrata*) In the Lake Ontario/St. Lawrence River Ecosystem: A Modelling Approach to Identification of Data Gaps and Research Priorities. Lake Ontario Committee. Great Lakes Fishery Commission. Ann Arbor, Michigan.
 h. Presentation slides of John Casselman, Ontario Ministry of Natural Resources, at International Eel Symposium, American Fisheries Society Meeting. 11-13 August, 2003.
 i. Casselman, J.M. 2001. Dynamics of American Eel Resources: Declining Abundance in the 1990s. Extended abstract of a paper presented to Advances in Eel Biology, Tokyo, Japan, September 28-30, 2001. Ontario Ministry of Natural Resources.
 j. Atlantic States Marine Fisheries Commission. 1999. Interstate Fishery Management Plan for American Eel (*Anguilla rostrata*). Fishery Management Report No. 36.

EXHIBIT FOUR—Other pertinent evidence categorized by folder as; Threats, Eel Biology & Life History, Passage, Endangered Species Act, BEP/DEP, Photos, IF&W/USFWS Documents DMR Androscoggin Reports & Expert Comments.

[All Exhibits plus Petition, Cover and Affidavit copy on CD]

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Petitioners Timothy A. Watts of 633 Wareham St., South Middleborough, MA 02346, Lori D. Keenan, 131 Cony Street Augusta, ME 04330, Will Everitt, 175 State St., Portland, ME 04101 Audrey Marra, 66 Lord Rd., Wayne, Maine 04248, Dee Cummins, 503 River Rd., Richmond, ME 04357, Ed Friedman, 42 Stevens Rd., Bowdoinham, ME 04008, Kathleen McGee, 32 Wildes Rd., Bowdoinham, ME 04008, Steve Musica, 565 Brunswick Rd., Richmond, ME 04357, Laura Moon, 4 Wadsworth Road, Brunswick, Maine, 04011, Macky Bennett, 25 Thompson St., Brunswick, Maine 04011, Chet & Jeanne Gillis, P.O. Box 233, Bowdoinham, ME 04008 , Anne Gorham, 347 Day Rd., Lyman, Maine 04002, Sen. Arthur Mayo, 83 Green St., Bath, Maine 04530, Tim Belcher, 31 Carding Machine Rd., Bowdoinham, Maine 04008, Wayne Dorr, 61 White Rd., Bowdoinham, Maine 04008, Barbara Moskol, 1003 Post Rd., Bowdoinham, Maine 04008, W. Howard Ellis, 619 Post Rd., Bowdoinham, Maine 04008, Rep. Deb Hutton, 31 Carding Machine Rd., Bowdoinham, Maine 04008, Julian Holmes, Lord Rd., Wayne, Maine 04248, Seth Berry, 1245 River Rd., Bowdoinham, Maine 04008, Stephen Alberg, 415 Bay Rd, Bowdoinham, Maine 04008, David Whittlesey, 182 Ridge Rd., Bowdoinham, Maine 04008, Jennifer Howell, 205 Starbird Corner, Bowdoin, Maine 04287, Sarah Wolpow, 45 Page St., Brunswick, Maine 04011, Kristen Salvatore, 74 River Rd., Richmond, Maine 04357, Marjolaine Whittlesey, 182 Ridge Rd., Bowdoinham, Maine 04008, Pippa & Milo Stanley 74 River Rd., Richmond, Maine 04357, Regine Whittlesey, 182 Ridge Rd., Bowdoinham, Maine 04008, Joseph Stanley, 74 River Rd., Richmond, Maine 04357, Rep. William Walcott, 12 Horton St., Lewiston, Maine 04240, Rep. Thomas Watson, 1565 Washington St., Bath, Maine 04530, Dr. Stephan Bamberger, 45 Page St., Brunswick, ME 04011, Rep. Sonya Sampson, 185 Sixth St., Auburn,

ME 04210, Rep. Sean Faircloth, P.O. Box 1574, Bangor, ME 04401, Dr. Richard Evans, 184 Bay Rd., Bowdoinham, ME, 04008, Rep. Margaret Craven, 41 Russell St., Lewiston, ME 04240, Sen. Joseph Perry, at 237 Grove St., Bangor, ME 04401, Rep. Joanne Twomey, 246 Elm St., Biddeford, ME 04005, Sen. Ethan Strimling, 211 Spring St., Portland, ME 04102, Rep. Elaine Makas, 10 Sheffield Ave., Lewiston, ME 04240, Sen. Dennis Damon, 256 Oak Point Rd., Trenton, ME 04605, Rep. Deborah Simpson, 84 Summer St., Auburn, ME 04210, Rep. Arthur Lerman, 95 Green St., Augusta, ME 04330, Lucette Musica, 565 Brunswick, Rd., Richmond, ME 04357, David W. Chipman, 103 Reach Rd., Harpswell, ME 04079, Sharon Drake, 1379 Washington St., Bath, ME 04530, Kathie Duncan, 303 River Rd., Woolwich, ME 04579, Paul Dumdey, 346 River Rd., Woolwich, ME 04579, Thomas Mitchell, 2 Wood Pond Road, Brunswick, ME 04011, Beverly Johnson, 263 Sunderland Drive, Auburn, ME 04210, Stephen Alberg, 415 Bay Rd, Bowdoinham, ME 04008, Bertrand Philippon, 14 Mill St., Topsham, ME 04086, Annette Philippon, 14 Mill St., Topsham, ME 04086, Anthony Cammarata, 13 McLellan St., Brunswick, ME 04011, Barbara Collins, 18 Red Fox Run, Harpswell, ME 04079, Vieva Kendig, 1087 West Rd., Bowdoin, ME 04287, Mathieu Duvall, 263 Sunderland Drive, Auburn, ME 04210, Tom Fusco, 66 Board Road, Brunswick, ME 04011, Elizabeth Leonard, 617 E. Neck Rd., Nobleboro, ME 04555, Rock Augostino, 347 Day Rd., Lyman, ME 04002, Douglas H. Watts, 131 Cony St., Augusta, ME 04330 and Friends of Merrymeeting Bay, PO Box 233, Richmond ME 04357 submit this Petition pursuant to Ch. 2 §27 of Department Rules requesting the Maine Board of Environmental Protection convene an adjudicatory hearing to consider Petitioners' evidence supporting the modification of existing water quality certification orders for the above dams to provide immediate safe and convenient upstream and downstream passage for the indigenous American eel (*Anguilla rostrata)* of the Androscoggin River watershed.

I. Standing of Petitioners.

Chapter 2 §27 of the DEP's Rules for the Processing of Applications and Other Administrative matters provides that any person, including the Commissioner, may petition the Board to revoke, modify or suspend a license. For the purposes of the Chapter 2 Rules, "person" means any individual; partnership; corporation; Federal, state or local government entity; association; or public or private organization of any character; except the agency conducting the hearing." To the extent that standing is construed by the Board or any court in subsequent actions as being

limited to any person who can demonstrate a particular interest harmed, it is settled that any harm to aesthetic, environmental or recreational interests confers standing. Fitzgerald v. Baxter State Park Authority, 385 A.2d 189, 196-7 (Me. 1978) (citing Sierra Club v. Norton, 405 U.S. 727 (1972).

II. Summary of Petitioners' Claim.

Petitioners come to the Maine BEP because substantial evidence shows the Androscoggin River and its tributaries are in non-attainment of their state water quality standards and designated uses as fish habitat due to the impact of the subject dams on the indigenous American eel (*Anguilla rostrata*). This non-attainment is due to the lack of any protective measures for the species at the subject dams or within §401 water quality certifications issued for these dams by the State of Maine. Since first constructed these dams have impeded and blocked American eels attempting to migrate upstream and downstream in the Androscoggin River watershed. This impact is exacerbated by the fact that those American eels which surmount one or several of the dams as juveniles are frequently killed in the hydroelectric turbines of the same dams as the eels attempt to reach the Atlantic Ocean as adults. Recent experience in Maine shows these negative impacts can be prevented through cost-effective, technological methods.

Only very recently has the State of Maine appreciated the significant impact of hydroelectric dams on American eels in Maine's waters. Only very recently has the State of Maine included protective measures for American eels in §401 water quality certifications at hydroelectric dams in Maine.[1] All but two of the Maine water quality certifications for the subject dams were issued by Maine BEP well before Maine BEP became aware of the severe impact of hydroelectric dams on American eels.[2] These water quality certifications make no mention of American eel nor provide them any protection at the subject dams. State law expressly grants Maine BEP the

[1]Documents show Maine environmental agencies have been aware of the killing of large numbers of migrating American eels at hydroelectric dams since as early as the 1980s but rejected requests by commercial eel fishermen and citizens to stop the killing . *See:* Nov. 2004 citizen petition to the U.S. Dept. of Interior to list the American eel as an endangered species in Exhibit Three.

[2]Maine BEP issued §401 water quality certification orders for the Gulf Island and Deer Rips Dams on Sept. 21, 2005. Maine BEP rejected requests by citizens to include provisions to protect American eel at these dams in the certification orders. The orders contain no protective provisions.

authority to correct these deficiencies today by modifying water quality certifications it has already issued. In addition to this express authority Maine BEP has, through its powers delegated by the Maine Legislature, an affirmative burden to prevent violations of Maine water quality standards and designated uses at any time it discovers them. Under Maine and federal law, violations of water quality standards cannot be grandfathered. Compliance must be actual and present. See the following*:*

"Congress intended the Clean Water Act to comprehensively prevent, reduce and eliminate water pollution in all its forms and to preserve the states' responsibilities and rights to do so within their bounds. CWA §101, 33 U.S.C. §1251. 'Pollution' could not be more broadly defined --any 'manmade or man-induced alteration' of the 'integrity of water.' CWA §502(19). The CWA 'expressly recognizes that water 'pollution' may result from 'changes in the movement, flow or circulation of any navigable waters ... including changes caused by the construction of dams.' PUD No. 1, 511 U.S. at 719-20 (quoting 33 U.S.C. §1314(f)(2)(F)." (State of Maine Respondent's Brief to U.S. Supreme Court in re: writ of certiorari of S.D. Warren. at 24.)

"The operation of dams affects water quality by obstructing the river and thereby creating or contributing to pollution." *Id.* at 24.

"There is also no dispute that each of these facilities, like almost all other hydropower projects, contribute to 'pollution' as that term is defined under §502(19) because each alters the chemical, physical and biological integrity of the water, causing the River to fail to meet water quality standards. Specifically, the Facilities do this by ... blocking fish to their spawning and nursery waters." *Id.* at 10.

"Petitioner's Facilities --and hundreds of dams like them --indisputably create pollution and contribute to the non-attainment of water quality standards." *Id.* at 26.

"The states are 'the prime bulwark in the effort to abate water pollution,' and '[one] of the primary mechanisms through which the States may assert the broad authority reserved to them is the certification requirement set out in section 401 of the Act.'" *Id.* at 24, quoting from *Keating v. Federal Energy Regulatory Commission*, 927 F.2d 616, 622 (D.C. Cir. 1991).
"[T]here is no statutory language or legislative history exempting FERC licenses from §401, and as discussed *infra*, the contrary is true. *See also*, *Escondido Mut. Water Co. v. La Jolla Band of Mission Indians*, 466 U.S. 765, 772-77 (1984) (Congress has created a multilayered

approach, wherein other agencies have authority to insist on conditions in FERC licenses)." *Id.* at7, fn. 6.

"Federal agencies must nonetheless incorporate the conditions of a state issued certification in any license or permit, 33 U.S.C. §1341(d), and cannot review the substance of state-imposed certification conditions, *American Rivers v. FERC*, 129 F.3d 99, 107-112 (2nd Cir. 1997)." *Id.* at 32, fn. 23.

"But for §401, the states would have no control over the water quality impacts of federally licensed hydropower facilities." *Id.* at 7.

"A statute should be interpreted so that its manifest purpose, policy or object can be accomplished." *Id.* at 23, quoting from *John Hancock Mut. Life Ins. Co. v. Harris Trust Savings Bank*, 510 U.S. 86, 94 (1993); 3 Singer, §58.6 at 107.

"The achievement of state water quality standards is one of the [Clean Water] Act's central objectives." *Arkansas v. Oklahoma*, 503 U.S. at 106.

"A project that does not comply with a designated use of the water does not comply with the applicable water quality standards." *PUD No. 1 of Jefferson County v. Washington Dept. of Ecology*, 511 U.S. at 714-715 (1994).

"A State may impose conditions on certifications insofar as necessary to enforce a designated use contained in the State's water quality standard." *Id.*

"Washington's Class AA water quality standards are typical in that they contain several open-ended criteria which, like the use designation of the river as a fishery, must be translated into specific limitations for individual projects." *Id.* at 716.

"The record in this case demonstrates that Warren's dams ... have blocked the passage of eels and sea-run fish to their natural spawning and nursery waters." Maine BEP. April 2003. Findings of Fact and Order on Presumpscot River Dams.

“All we ask is that activities that threaten to pollute the environment be subjected to the examination of the environmental agency for the state for an evaluation.” Maine Senator Edmund S. Muskie. 117 Cong. Rec. 38,854 (1971).

“No polluter will be able to hide behind a Federal license or permit as an excuse for a violation of water quality standard[s].” *SD Warren v Maine BEP*. Supreme Court of the United States. May 2006 No. 04-1527

Petitioners cite the above authorities because they support the factual and legal basis of Petitioners’ claim. State and federal law require immediate safe passage for American eel at Androscoggin River dams. The State of Maine has the responsibility and authority to require immediate provision of such passage through modification of §401 water quality certifications for these dams. Statute compels Maine do so.

III. Evidentiary Basis Supporting the Need for a Public Adjudicatory Hearing on this Claim.

A. Introduction to the American eel.

Morgan (1930) states: "American eel are snake-like fishes which live in fresh water from their early youth to breeding time and then migrate into salt water, never to return again. The eels which come up the streams are the young ones of another generation which have traveled the long and unknown way from the sea. Full grown eels are about three feet long, plain colored, greenish brown above and pale greenish gray beneath. Every inch of their bodies is sinuous and flexible, well earning the phrase 'squirms like an eel.' During their freshwater sojourn eels usually live on the muddy bottoms of streams or in stream fed ponds. Although they generally seek deep streams they often work their way up brooks along the coast. It is a surprising but not a unique experience to catch an eel on the hook which is meant for a brook trout. Sometimes eels come out of the water and hide under muddy stones in swampy ground a few feet from the shores and they have been seen foraging on the sand along the stream sides. Eels eat almost any animals dead or alive --insect, fishes, frogs and water-rats --as well as aquatic plants. The life history of eels was not completely known until 1925 when Schmidt published his studies of both American and European species.

The breeding place of American eels appears to be north of the West Indies, west and south of the regions where European eels breed. Eels spawn in deep waters and their eggs hatch into

transparent floating larvae. American eels keep their larval form for about a year during which they drift near the surface. Then they are caught in the current of the Gulf Stream and carried toward the American coasts. Only when they near the coastal waters, at a depth of 3,000 feet or less, do they begin to take on the shape of adult eels. Finally small eels but two or three inches long begin to come up the rivers in great numbers. In Rhode Island young eels go up the Taunton River through April and May; in some other rivers they appear later; in many of them, thousands can be seen on the mud flats at river mouths when the tide is out. Like lampreys they rest by day and travel by night, with unbroken persistence working their way up toward the regions forsaken by their parents. Only the females persevere to the headwaters; the males stay in the lower parts of the stream. They live in these places for a number of years and then another change comes over them. They cease eating, their skins turn white and shimmering and they begin their long journey to the sea. These are the 'silver eels' which are caught in traps, as they journey downstream, resting by day and moving by night. Size --three to four feet."

American eel are among the longest-living animals in North America. Female American eel in northern latitudes can reach ages of 20-50 years old before their sole spawning migration to the Sargasso Sea. A record exists of an American eel living 88 years in captivity (Gail Wippelhauser, Maine Department of Marine Resources, personal communication to Douglas Watts, 1996).

The executive summary of the Atlantic States Marine Fisheries Commission's Interstate Fishery Management Plan for American Eel (2000) states: "The American eel occupies and is exploited in fresh, brackish and coastal waters along the Atlantic from the southern tip of Greenland to northeastern South America. The species has a catadromous life cycle, reproducing only in the Sargasso Sea and spending the majority of its life in freshwater. After hatching and ocean drift, initially in the pre-larval state and then in the leptocephalus phase, metamorphosis occurs. In most areas, glass eel enter the nearshore area, although there have been reports of leptocephalus found in freshwater. Glass eel, elvers, yellow and silver eel are found in the marine environment during part of their life cycle. Elvers, yellow eels and silver eel also make extensive use of freshwater systems." The full text of the Atlantic States Marine Fisheries Commission's Interstate Fishery Management Plan for American Eel (2000) provides a detailed description of what is currently known of the life history, habits and habitat requirements of the American eel. This Plan is included with this petition in Exhibit Three and its contents are incorporated into this petition by reference.

Humans have watched, caught and eaten American eel living in the waters of the United States of America since the last Ice Age. In 1991, a prehistoric wooden-stake fish weir was discovered at the mouth of Alder Stream on Sebasticook Lake in Newport, Maine. Radio-carbon dating of the wooden stakes by archaeologists with the University of Maine at Farmington revealed the sharpened wooden stakes of the fish weir range in age from 5,800 to 1,700 years old. The Sebasticook Lake fish weir is the oldest known fish weir in North America (Bruce Bourque, Chief Archaeologist, Maine State Museum, personal communication to Douglas Watts, October 2004).

The location of the Sebasticook Lake fish weir, at the mouth of Alder Stream, suggests it was used to capture female American eels during their fall migration to the Sebasticook River, the Kennebec River and the Atlantic Ocean. Since the 18th century, a rapids at the end of a long deadwater on the Sebasticook River in Burnham, Maine is called "Eel Weir Rips" due to long-term use of the site to catch female American eels during their migration to the Atlantic Ocean. The downstream "V" orientation of a prehistoric stone fish weir on the Satucket River in East Bridgewater, Massachusetts suggests it was used by Native Americans to capture female American eels moving downstream from Monponsett and Robbins Ponds during their fall migration to Narragansett Bay and the Atlantic Ocean. Lithic artifacts found at the weir by archaeologists with Bridgewater State College date the Satucket River stone fish weir to 2,500 B.P.

Dohne (2004) states of the Susquehanna River: "Long before the rivers were dammed and polluted by the white man, the American Indians were well-acquainted with the autumn migration of the eel. Swatara, as in Swatara Twp. and Swatara Creek, is the anglicized word for a Susquehannock Indian term meaning "where we eat eels." With a caloric value six times that of any other freshwater fish, the eel was a prized catch, tasting somewhat like chicken, though quite bony. It was smoked for winter and "travel" rations. Weirs, or V-shaped rock formations pointing downriver, were fashioned to funnel migrating adult eels into basketlike traps. In some stretches of the lower Susquehanna, remnants of weirs can be spotted during low-water conditions."

Eckstorm (1938) states that Kenduskeag Stream, a tributary of the Penobscot River entering tidal waters at Bangor, Maine receives its name as an "eel spearing place" in the Penobscot Indian language. Eckstorm states the name of tidal stream on the Kennebec River in Pittston, Maine -- Nehumkeag Brook --has a similar derivation and meaning.

ASMFC (2000) states: "Since the early 17th century, Native Americans have harvested eel for food and cultural sustenance. Today, commercial and recreational fisheries for American eel are seasonal, but remain economically important by providing both direct and indirect employment ... Since the fishery's peak in the mid 1970s at 3.5 million pounds, commercial landings have declined significantly to a near record low of 868,215 pounds in 2001. Recreational data concerning eel harvest appears to indicate a decline in abundance. According to the NMFS Marine Recreational Fisheries Statistics Survey, recreational harvest in 2001 was 10,805 eel, a significant decrease from the peak of 106,968 eel in 1982." ASMFC (2000) further states: "Harvest pressure and habitat loss are listed as the primary causes of any possible historic and recent decline in abundance of American eel (Castonguay et al. 1994a and 1994b). Several factors contribute to the risk that heavy harvest may adversely affect eel populations: (1) American eel mature slowly, requiring 7 to 30+ years to attain sexual maturity; (2) glass eel aggregate seasonally to migrate; (3) yellow eel harvest is cumulative stress, over multiple years, on the same year class; and (4) all eel mortality is pre-spawning mortality."

The American eel is in steep decline across its range in the United States of America. Juvenile recruitment to the St. Lawrence River system and Lake Ontario has virtually ceased during the past decade. The number of juvenile eels migrating into the St. Lawrence River has fallen from 935,000 individuals in 1985 to approximately 8,000 in 1993 and to levels approaching zero in recent years (ASMFC 2000). Dohne (2004) states: "Lake Ontario, which had as many as 10 million eels two decades ago, now holds only tens of thousands, according to Ontario's Ministry of Natural Resources. The Ministry says Ontario's commercial eel harvest peaked at more than 500,000 pounds in 1978. Last year's take was a fraction of that, or 30,000 pounds. Ontario officials blame the eel's plight on overharvesting, migration barriers, climate conditions and hydro-dam turbines. Monitoring of St. Lawrence River hydro dams reveals that 46 percent of adult eels exit the turbines dead."

The number of juvenile eels counted annually at the Conowingo Dam on the Susquehanna River has declined from a peak of 126,543 in 1974 to nearly zero in recent years (ASMFC 2000). At the November 18, 2002 meeting of the ASMFC Eel Management Board, Mr. Richard Snyder, ASMFC representative for Pennsylvania, stated: "No American eels really pass the Conowingo Fish Lift, based on the annual samplings there lately."

U.S. harvests of American eel on the Atlantic Coast have declined 64 percent of the long-term average since 1950; almost 44 percent below the 20-year average; and about 30 percent below the five year average, based on 2002 harvest reports collected by the Atlantic States Marine Fisheries Commission (Geer 2004). ASMFC (2000) states: "Harvest pressure and habitat loss are listed as the primary causes of any possible historic and recent decline in abundance of American eel (Castonguay et al. 1994a and 1994b). Several factors contribute to the risk that heavy harvest may adversely affect eel populations: (1) American eel mature slowly, requiring 7 to 30+ years to attain sexual maturity; (2) glass eel aggregate seasonally to migrate; (3) yellow eel harvest is cumulative stress, over multiple years, on the same year class; and (4) all eel mortality is pre-spawning mortality. Habitat losses have been a chronic problem since the arrival of the Europeans. Blockage of stream access, pollution and nearshore habitat destruction limit habitat availability for eel. Castonguay et al. (1994b) indicated that oceanic changes may now also contribute to decline in eel abundance. Busch et al. (1998) estimated that diadromous fish, dependent on access to Atlantic coastal watersheds, may be hindered from reaching up to 84 percent of upstream habitats."

On August 14, 2003, eel biologists from 18 countries meeting in Quebec, Canada, drafted and unanimously approved a declaration titled: The Quebec Declaration of Concern: Worldwide Decline of Eels Necessitates Immediate Action. This declaration was written at the 2003 International Eel Symposium, held in conjunction with the 2003 American Fisheries Society Annual Meeting, Quebec, Canada, 14 August, 2003. The Declaration states:

"The steep decline in populations of eels endangers the future of these legendary fish. With less than 1 percent of major juvenile resources remaining, precautionary efforts must be taken immediately to sustain these stocks. In recent decades, juvenile abundance has declined dramatically; by 99 percent for the European eel (*Anguilla anguilla*) and by 80 percent for the Japanese eel (Anguilla japonica). Recruitment of American eel (Anguilla rostrata) to Lake Ontario, near the species' northern limit, has virtually ceased. Eels, which depend on freshwater and estuarine habitats for their juvenile growth phase, anthropogenic impacts (e.g. pollution, habitat loss and migration barriers, fisheries) are considerable and may well have been instrumental in prompting these declines.

Loss of eel resources will represent a loss of biodiversity but will also have considerable impact on socioeconomics of rural areas, where eel fishing still constitutes a cultural tradition. Research is underway to develop a comprehensive and effective restoration plan. This, however, will

require time. The urgent concern is that the rate of decline necessitates swifter protective measures.

As scientists in eel biology from 18 countries assembled at the International Eel Symposium 2003 organized in conjunction with the 2003 American Fisheries Society Annual Meeting in Quebec, Canada, we unanimously agree that we must raise an urgent alarm now. With less than 1 percent of juvenile resources remaining for major populations, time is running out. Precautionary action (e.g., curtailing exploitation, safeguarding migration routes and wetlands, improving access to lost habitats) can and must be taken immediately by all parties involved and, if necessary, independently of each other. Otherwise opportunities to protect these species and study their biology and the cause of their decline will fade along with the stocks."

The entire Androscoggin River watershed in Maine is indigenous habitat for the American eel. Maine fisheries scientists have found American eels living throughout the river drainage, even in the Rangeley Lakes. American eels are extraordinary animals due to their ability and desire to occupy nearly every river, lake and pond in Maine. Unlike resident fish, American eels must gain access to the Androscoggin River watershed by an arduous migration from the mid-Atlantic Ocean. American eels undertake the longest freshwater migration of any fish in North America and historically travelled up the entire Mississippi River to its headwaters in Minnesota. American eels travel farther inland than any other migratory fish native to Maine and consistently turn up in places where no scientist thought they could reach. How the American eel achieves these feats is still much of a mystery.

At each moment during their extraordinary migration, American eels are sought by predators. Oceanic predators include virtually every animal species larger than the eels themselves. Freshwater predators include mink, otter, mergansers, sea gulls, loons, snapping turtles, starlings, bald eagles, great blue heron, egrets, kingfishers, striped bass, brook trout and even dragonfly nymphs. Ancient stone and wooden fish weirs at Sebasticook Lake in Newport, Maine and the Satucket River in East Bridgewater, Massachusetts show humans have been catching and eating American eels in New England for at least the past 5,000 years.

American eels which succeed in migrating to the innermost portions of the Androscoggin River drainage each year are extraordinary animals. These eels have survived a panoply of constant threats to their lives. Nearly all of the eels in freshwater are females. These eels are the breeding stock --the egg supply --for future generations of American eels. Between the ages of 8 and 50,

these female eels undergo a profound physiological change and prepare themselves for a 2,000 mile migration to their birthplace in the mid-Atlantic Ocean where they will mate, give birth and die.

The life history of the American eel is one of the most miraculous and unique in all of nature. They still live, in sharply decreasing numbers, in nearly all of our backyards. Scientific evidence herein shows that unless humans in the United States begin protecting American eels and their habitat it is likely the American eel will disappear from Earth within our lifetime. Maine citizens are now presented with the same issue which confronted Maine citizens 50 years ago regarding Maine's Atlantic salmon. We are confronted with stark evidence showing a native animal is disappearing before our eyes due to severe, long-term human impacts upon its life and natural environment.

The Atlantic salmon of Maine and the United States are virtually extinct today because humans did not heed obvious warning signs 50 years ago. Because humans did not heed these warning signs for 50 years there are so few Atlantic salmon left in Maine and the United States today that even the most elaborate and expensive restoration efforts may not save them. There are still enough American eels left in Maine and the United States today to save them -but only if we act quickly.

The most important restoration measure Maine citizens can undertake today is to protect the lives of the pregnant female eels which migrate down from Maine's rivers each fall to the Atlantic Ocean to give birth. The Androscoggin River is the third largest in Maine and the fourth largest in New England. The lives of the female American eels of the Androscoggin River --and their precious cargo of eggs --are the subject of this Petition.

B. This Petition is necessary because Maine has failed to use its legal authority to require safe passage for American eel at the Androscoggin dams.

At this procedural moment under Ch. 2 §27, Petitioners merely request the Maine BEP conduct a public adjudicatory hearing on the proffer of evidence made herein. Petitioners assert their proffer of evidence is sufficient for the Maine BEP to find a hearing is warranted. Maine BEP and Commissioner of Maine DEP have had for many years the authority to initiate proceedings to modify water quality certification orders at the subject dams to protect American eels. Maine BEP and Maine DEP have failed to do so. Federal licenses for these dams allow the State of

Maine and its fisheries agencies to petition the Federal Energy Regulatory Commission and the U.S. Fish & Wildlife Service to make the operational changes requested herein. The State of Maine has failed to do so.

In Sept. 2005, Maine BEP approved water quality certification orders for two of the dams in this Petition, the Gulf Island and Deer Rips dams. Despite timely requests by citizens, Maine BEP refused to require any protection for American eels at these two dams in their water quality certification orders. Petitioners request is made solely because of Maine's repeated failure to require these changes on their own. Maine DEP staff have at times suggested Petitioners should petition FERC to make these changes, thereby relieving Maine BEP of its responsibility to enforce Maine water quality laws.

The lack of safe passage for American eel at these dams is a violation of Maine water quality laws. FERC has no responsibility to enforce Maine laws. Maine BEP does. Maine law allows the BEP to modify previously issued water quality certification orders to ensure Maine water quality laws are not violated. For Maine BEP to suggest Petitioners take their grievance to FERC is an abdication of Maine BEP's responsibility to enforce Maine's laws.

It is not relevant whether Petitioners have other potential regulatory avenues to ensure the Androscoggin River attains its legal water quality standards. FERC regulations and the Federal Power Act afford very limited opportunities for citizens to request changes to existing federal dam licenses. FERC's regulatory process is extremely slow. Unlike under Ch. 2 §27, Petitioners have no legal claim if FERC denies or ignores such a citizen request. Petitioners may informally request the U.S. Fish & Wildlife Service to require eel passage at Androscoggin River dams if USFWS has reserved this authority in licenses for these dams. However, USFWS has no legal obligation to act upon such a request or even respond to it. If a request is denied, citizens have no legal claim against USFWS. Petitioners may informally request the State of Maine and its fisheries agencies make this request to USFWS or FERC. This has already been done by citizens with no response (*See*: Letters of Friends of Merrymeeting Bay and Friends of the Kennebec Salmon to DEP Commr. Dawn Gallagher, July & August 2005). Our Ch. 2 §27 request for a public hearing on this topic before the Maine BEP is the *only* option which allows Petitioners the right to judicial review of our claim in Maine's courts. Ch. 2 §27 affords citizens this right. Petitioners now exercise it.

Maine admits it has numerous regulatory options to ensure safe passage for American eels at the

Androscoggin dams. But Maine refuses to use them. Our proffer of evidence shows the need for safe eel passage on the Androscoggin is acute and long overdue. It is unknown why Maine refuses to exercise its numerous regulatory options to solve this problem. The only plausible explanation for Maine's inaction is that Maine believes there is no problem. Evidence for the problem is set forth below.

C. Undisputed Factual Evidence.

In its 2 February 2006 finding of fact the Maine Board of Environmental Protection found substantial evidence showing that: (a) American eel exist today throughout the Androscoggin River watershed; (b) No dams in the Androscoggin River watershed are equipped with safe and effective upstream and downstream passage facilities for American eel; (c) The lack of safe downstream passage for American eels at these dams is likely causing mortality to pregnant, female American eels attempting to reach the Sargasso Sea to give birth.

D. The lack of safe and effective passage for American eel at the subject dams is an immediate and ongoing threat to the environment.

"The mechanical grind of hydroelectric turbines often kills large numbers of fish that pass downstream." **--**Amicus Curiae Brief of 35 of the United States, the Commonwealth of Puerto Rico and the Pennsylvania Department of Environmental Protection on writ of certiorari by S. D. Warren Company. United States Supreme Court. January, 2006.

Ch. 2 §27 requires Maine BEP to hold a public hearing if Petitioners' evidence shows modifications of water quality certification orders are necessary to stop an activity which is a threat to the environment. Ch. 2 §27 does not specifically define the phrase "threat to the environment." Petitioners assert that the killing of American eels in the turbines of dams is a "threat to the environment"; dams which prevent juvenile eels from migrating past these dams are a "threat to the environment"; and dam operations which cause or contribute to the failure of waterbodies to attain their legal water quality standards are a "threat to the environment."

There is no factual dispute whether the Androscoggin River dams affect American eels and their environment. Hydroelectric dam turbines kill adult American eels migrating to the ocean. Hydroelectric dams prevent juvenile American eels from migrating into their freshwater habitat. The Androscoggin is the most intensively dammed river in Maine. Female American eels

migrating from the Androscoggin River above Jay, Maine must pass more than ten hydroelectric dams to reach the Atlantic Ocean. Even at 80 percent *survival* at each dam, the cumulative *mortality* of female American eels would be nearly 90 percent (of 1,000 eels initiating migration, 900 would be killed at the dams and only 100 would reach the Atlantic Ocean). It is without question that prior to dam construction on the Androscoggin, American eels were not subject to 90 percent mortality during their migration down the Androscoggin River past dams which did not exist.

In its Supreme Court Brief at 9, Maine argues that hydroelectric dams cause pollution by blocking the natural migration of fish: "There is also no dispute that each of these facilities, like almost all other hydropower projects, contribute to 'pollution' as that term is defined under §502(19) because each alters the chemical, physical and biological integrity of the water, causing the River to fail to meet water quality standards. Specifically, the Facilities do this by ... (3) blocking fish to their spawning and nursery waters." Pollution is a threat to the environment. If pollution was not a threat to the environment, it would not be called pollution. The killing of American eels by dam turbines and the lack of safe passage facilities for eels at dams, by Maine's own argument to the U.S. Supreme Court, is a type of pollution and a threat to the environment as defined in Ch. 2 §27.

E. A *de minimis* argument on the impact of the dams has no validity.

It has been suggested, without any evidence, the impact of the Androscoggin dams on American eel is slight and no greater than the impact caused by natural predation or incidental catches by anglers. This is the *de minimis* argument. Evidence shows this argument has no factual basis. This argument been rejected by the State of Maine in water quality certification proceedings for nearly a dozen hydroelectric dams in the Presumpscot and Kennebec River drainages since 1998.[3]

The Androscoggin is the most intensely dammed river in Maine. Most American eels in the Androscoggin River face between 5 and 10 consecutive dam passages to migrate downstream as

[3]The volume of factual evidence provided in this Petition greatly exceeds that relied upon by Maine BEP in water quality certification orders issued between 1998 and 2003 which require safe eel passage at 12 hydroelectric dams on the Kennebec, Sebasticook and Presumpscot Rivers. In these proceedings, Maine BEP never stated that photographic evidence of eel kills at specific dams was necessary to warrant requirements for safe downstream passage at those dams; nor was photographic evidence of juvenile eels blocked by specific dams necessary to require installation of upstream eel passage at those dams.

adults. Downstream passage is particularly dangerous for American eels because they are very large animals, up to four feet long, and tend to migrate through the unscreened turbine intakes of the dams rather than over the dam spillway. Except at flood flows, most of the water in the Androscoggin and Little Androscoggin Rivers is diverted into the turbines of these hydroelectric dams. Obeying their natural instinct, adult American eels follow the river flow into these turbines when migrating past the dam.

Arithmetic shows that the sheer number of hydroelectric dam passages American eels must undertake exacts a very high price on their lives. Even at a theoretical level of 80 percent survival at each dam, the cumulative mortality for American eels attempting to reach the Atlantic Ocean would be as high as 90 percent for eels migrating above Jay, Maine (ten consecutive dam passages). For American eels migrating from the Androscoggin River watershed between Jay and Lewiston-Auburn, Maine the cumulative mortality would be in excess of 50 percent --even at a theoretical level of 80 percent survival at each individual dam.[4]

The only quantitative studies conducted in Maine for American eel passage at hydroelectric dams were done by the Maine Department of Marine Resources in the Kennebec River drainage from 2000 to 2002 using small numbers of radio-tagged female eels released directly above a dam and allowed to swim freely past it. Radio-tracking of adult female American eels by the Maine Department of Marine Resources (Maine DMR) at the Benton Falls Project in 2000 and 2001 indicate more than 50 percent of the migrating eels attempting to pass the Benton Falls project are entrained and killed in the project turbines. In fall 2001, Maine DMR staff used an underwater videocamera at the Benton Falls Project turbine outfall to attempt to locate two radio-tagged eels which had passed through the Benton Falls Project turbines. The videocamera revealed large numbers of dead eels and eel carcasses resting on the river bottom at the turbine outfall. Maine DMR's 2001 study reported stated:

"DMR personnel attempted to recover these eels on five occasions (10/22, 10/26, 10/31, 11/2, 12/7). An underwater camera revealed a deep hole below the tailrace that contained many portions of eel carcasses in various states of decay. It was apparent these eels had been killed by turbine blades .... Based on two years data, the surface bypass at Benton Falls is not efficient at passing eels."

[4]These facts illustrate why Maine BEP in 2003 required mandatory turbine shutdowns for migrating American eels at S.D. Warren Company's five hydroelectric dams on the Presumpscot River during the 8-10 week fall migration season for female American eels. When numerous dams are "daisy-chained" in consecutive fashion, as on the Presumpscot and Androscoggin Rivers, even small levels of passage mortality at each dam quickly add up to nearly 100 percent cumulative mortality because female eels, by reproductive instinct, attempt to pass all of the dams on the river to reach the Atlantic Ocean and give birth to their children.

In fall 2004 Maine DMR biologists and citizens documented hundreds of dead American eels below the Benton Falls Dam. Based upon these observations, female American eels were being killed at this dam from mid-September to at least early November, ie. throughout the entire fall eel migration season. During this entire period, the installed surface downstream fish passage system was operating yet unable to guide migrating American eels away from the turbine intakes of the Benton Falls Dam. Due to these severe mortalities, the dam's owner in Sept. 2005 placed metal screening across the entire turbine intakes to prevent eels from gaining entrance to the turbines. After installation of this protective screening, turbine mortalities of American eels ceased at the dam during the fall 2005 eel migration season.

Radio-tracking of adult American eels by the Maine Department of Marine Resources just above the Lockwood Dam on the Kennebec River during fall 2002 suggests that 40 percent or more of the adult American eel attempting to migrate past the Lockwood Project are entrained and killed in the turbines each year, despite the availability of the project spillway for passage. This study -- and data gathered from American eel kills at other hydro-electric dams in Maine --indicates the availability of spillway passage alone will not provide safe passage for adult American eels at Maine hydroelectric dams.

Since 2000, severe kills of migrating adult American eel have been repeatedly documented by the Maine Department of Marine Resources at the American Tissue Dam (FERC No. 2809) on Cobbosseecontee Stream in Gardiner, Maine. Spillway passage is available for American eel at the American Tissue Project. However, recent fish kills of American eel demonstrate that most migrating American eel select the American Tissue Dam turbine intake as their migration route, rather than the dam spillway. This has caused significant entrainment and death of American eel in the project turbines since the dam was redeveloped for hydro-power more than 20 years ago. In 2002 and 2003, American eel kills at this dam were only stopped after the institution of dusk to dawn turbine shutdowns. In Sept. 2004 the dam owner, Ridgewood Renewable Power, screened off the turbine intake to prevent eels from entering the turbine. Since that date American eel mortality at the dam has dropped to zero.

Based upon the observed 40-50 percent minimum mortality of migrating eels at a single dam found in the Maine DMR studies cited above[5] approx. 50 percent of the eels migrating past the Brunswick Dam are killed each fall; 75 percent of the eels passing the Pejepscot and Brunswick Dams are killed each fall; and 85 percent of the eels passing the Worumbo, Pejepscot and Brunswick dams are killed each fall. Based on the same data, the cumulative mortality of adult

eels migrating from the Androscoggin River above Lewiston and Auburn, Maine and the entire Little Androscoggin River exceeds 90 percent each year. For American eels migrating from above Jay, Maine the cumulative mortality is nearly 100 percent. These facts refute the *de minimis* argument for downstream passage.

Regarding upstream passage for juvenile American eels, none of the subject dams are equipped with specially designed upstream eel passage systems; nor have any of the subject dam owners expressed any intention of installing them. The ability of small, juvenile American eels to migrate into upstream habitat past natural or artificial barriers is well known to be constrained by current velocities which exceed their physical stamina and swimming speed. For this reason, juvenile American eel cannot utilize upstream passage systems designed for much larger and more energetic fish such as adult Atlantic salmon or American shad. Upstream fishways at the three lowermost Androscoggin River dams (Worumbo, Pejepscot, Brunswick) are designed to pass large, energetic adult fish --not 2 to 3 inch long baby eels. None of the other subject dams have fishways for any fish species. In recent years a highly specialized fish passage system designed exclusively for juvenile American eels has been used with great success in the Kennebec River drainage. It is called an "eel ramp." These ramps work because they mimic the way in which

juvenile eels climb over natural obstacles in rivers. These ramps consist of a long, inclined plane of wooden construction covered with a porous, plastic mesh. The ramps extend from the top of the dam spillway to its base and are located where observations show juvenile eels naturally congregate to try and get past the dam. A thin trickle of water flows from the top of the inclined ramp through the porous, plastic mesh all the way to the bottom and keeps the ramp moist. The juvenile eels then climb up and through the porous, plastic mesh in a thin film of water to the top of the ramp and over the dam spillway and continue their upstream migration. Maine DMR observations show that upwards of 100,000 juvenile eels successfully use the eel ramp at the Fort Halifax Dam on the Sebasticook River in Winslow, Maine each spring and summer. Similar eel ramps are now in operation or plan to be constructed soon at 12 other hydroelectric dams in Maine. All of these eel ramps are required by Maine BEP water quality certification orders issued for the dams. Based

[5]In oral testimony to Maine BEP on Jan. 19, 2006 Maine DMR Commissioner George Lapointe described the above referenced Maine DMR scientific studies as "inconclusive." To the contrary, these studies have conclusively shown that American eel mortality is severe at all dams studied by Maine DMR; that surface bypasses alone do not keep American eels from entering dam turbines; that turbine passage kills nearly 100 percent of eels which migrate through the turbines; and that evening turbine shutdowns or the screening of turbine intakes have thus far been the only methods shown to prevent American eels from being killed in large numbers at these dams.

on Maine BEP's own actions at these dams, there is no legal or scientific basis for similar eel ramps to *not* be installed at the Androscoggin River dams.

F. Water quality certifications for the subject dams fail to include standards and limitations legally required on the date of issuance.

Maine Senator Edmund Muskie said in 1970 during Congressional Debate on the immediate predecessor of the federal Clean Water Act: "This provision may be the most important action of this legislation. I call the Senate's attention to section 21. This section requires that any applicant for a federal license or permit obtain certification of reasonable assurance of compliance with water quality standards before that applicant can receive any license or permit." (116 Cong. Rec. 8,984 (1970) on H.R. 4148 after amendment by the Conference Committee).

As stated by Senator Muskie, what has become §401 of the Clean Water Act requires applicants or holders of federal permits to provide "reasonable assurance" their activities will not violate state water quality standards. In order to issue water quality certification orders for a hydroelectric dam, the State of Maine must find there is reasonable assurance the dam will not violate Maine water quality standards. If such reasonable assurance is not found, certification cannot be issued. S.D. Warren, 2005 ME 27. As Senator Muskie declared in 1970, §401 of the Clean Water Act exerts an affirmative burden on the license holder and state permitting agencies to ensure the activities do not cause violations of state water quality standards. There is no "grandfathering" of Maine water quality standards. Compliance must be actual and present. S.D. Warren, 2005 ME 27, ¶ 21.

In practice, Maine BEP *assumes* a dam is not violating Maine water quality statutes unless other parties provide evidence to the contrary. Maine DEP writes §401 water quality certification orders and presents them to Maine BEP for final approval. While preparing §401 certifications Maine DEP asks Maine fisheries agencies for written comments on whether the hydroelectric dam in question affects fish species. If Maine's fisheries agencies fail to provide written comments to Maine DEP regarding a particular fish species, Maine DEP does not place any conditions in the §401 certificate to protect that species.

In the case of the water quality certifications discussed herein, none of Maine's fisheries agencies asked Maine DEP to include *any protections* for American eel at these dams --and so Maine BEP included no protections for American eels in these §401 certifications. Because Maine's fisheries agencies have been silent on the protection of American eels at the Androscoggin River dams,

the §401 certifications for the dams are silent as well. Within this silence thousands of eels are being killed.

Because of the process described above, a Maine water quality certification does not mean the subject dam is *actually* in compliance with Maine water quality laws. Water quality certification only means Maine BEP *assumes* the dam is in compliance with Maine law. Regarding the American eel, evidence shows that on the Androscoggin River dams Maine BEP's assumptions have been 100 percent wrong. Maine BEP water quality certification orders for the Androscoggin River dams do not mention the American eel, let alone require safe passage for them at the dams. 1998 marked the first time Maine BEP required upstream safe passage for American eels in water quality certifications for any hydroelectric dams in Maine. This occurred when Maine BEP modified water quality certificates for seven hydroelectric dams on the Kennebec and Sebasticook Rivers pursuant to Ch. 2 §27.

In 2003, Maine BEP issued water quality certificates for five dams on the Presumpscot River requiring safe upstream *and* downstream passage for American eels. This marked the first time Maine BEP had ever required safe *downstream* passage for adult eels at any Maine dam in a water quality certification. The reason for this sudden change in Maine BEP practice was because prior to 1998, the Maine Dept. of Marine Resources (Maine DMR) had never requested Maine BEP require safe American eel passage in water quality certifications. Beginning in 1998, Maine DMR began requesting this.

By 1998 Maine DMR fisheries scientists had begun to appreciate the severe impact of hydroelectric dams on American eels. The Androscoggin River dams subject to this petition are no different than those dams on the Kennebec, Sebasticook and Presumpscot Rivers where Maine BEP has required safe eel passage in water quality certification orders since 1998. They are hydroelectric dams lying within the indigenous habitat of the American eel. None provide safe passage for American eel.

The error-prone method used by Maine DEP and BEP to produce §401 water quality certifications is demonstrated in water quality certifications issued September 21, 2005 by Maine BEP for the Gulf Island and Deer Rips hydroelectric dams on the Androscoggin River in Auburn, Maine. For unknown reasons Maine fisheries agencies provided no comments to Maine DEP on the need for American eel passage at these dams. Because the fisheries agencies made no written comments to Maine DEP regarding American eel passage, Maine DEP concluded no

protections were required.

The Conservation Law Foundation asked Maine DEP to require *monitoring* of American eels at the two dams during the 40-year FERC licenses and the insertion of a re-opener clause in the certification order to require upstream and downstream passage facilities if monitoring showed such facilities were necessary. Maine DEP rejected this request solely because Maine's fisheries agencies made no reference to American eels or passage for American eels in their written comments to Maine DEP.

This shows that even after a citizens' organization alerted Maine DEP to a serious factual omission in its draft certification order, Maine DEP refused to amend the order based on this new information, nor did Maine DEP go back to Maine fisheries agencies and ask them if such changes were necessary. Instead, Maine DEP used the failure of Maine fisheries agencies to do their job as an affirmative defense for Maine DEP to not do its job. If left uncorrected, this error will kill virtually ever female American eel trying to migrate down the Androscoggin River past these dams for the next 40 years. This example, which occurred on the Androscoggin River only 6 months ago, demonstrates that Maine BEP, Maine DEP and Maine fisheries agencies cannot be relied upon to take seriously their affirmative duty under state and federal law to protect indigenous American eels -even during federal dam re-licensing proceedings.[6]

Safe passage for eels is required in §401 water quality certifications due to the language of Maine's water quality standards, Maine's anti-degradation statute and the designated use of fish habitat assigned to the Androscoggin River and its tributaries under Maine statute. The relevant portions of these statutes were in effect when the existing water quality certifications for the subject dams were issued by Maine BEP. Until 1998 Maine BEP neglected to enforce these statutes as they regarded American eel at *any* dam in Maine, including the Androscoggin dams.(*See*: Oral statement of Dana P. Murch to Maine BEP, Nov. 3, 2005 in which Mr. Murch stated that prior to the late 1990s "nobody was even thinking about American eels.") Since 1998 Maine BEP has recognized that safe eel passage is a requirement of Maine water quality laws where American eels are present.

[6]This incident refutes Maine BEP's recent contention that Petitioners should have made their concerns about American eels known during initial water quality certification proceedings for the subject dams. As shown above, the BEP refused to protect American eels at the Gulf Island and Deer Rips Dams in 2005 even when citizens asked for eel protection during the initial certification proceeding. The way in which Maine BEP has dealt with American eel protection on the Androscoggin River to date shows exactly why Maine law allows modifications of water quality certification orders. To reason otherwise requires one to believe Maine BEP never makes a mistake.

Evidence shows that when water quality certifications were issued for the Androscoggin dams, Maine BEP *presumed* that safe eel passage at these dams was not necessary. Evidence shows Maine BEP's presumption was wrong. Maine BEP's requirements for safe eel passage at dams in water quality certification orders for multiple dams on the Kennebec, Sebasticook and the Presumpscot Rivers since 1998 demonstrate this fact.

In its 2 February 2006 findings of fact Maine BEP argues these Androscoggin River water quality certificate orders are legal today solely because Maine BEP was not provided with evidence showing safe eel passage was required when the certifications were first issued. This is irrelevant.

What matters is whether Maine water quality statutes *required* safe eel passage on the date these water quality certifications were issued. Evidence shows safe eel passage was required by Maine law --but Maine BEP did not require it. Rather than fixing the error, Maine BEP now tries to *grandfather* the error. Maine law does not allow this. *See*: S.D. Warren. Evidence shows water quality certifications for the subject dams fail to include standards and limitations legally required on the date of issuance.

G. Licensees are violating Maine laws administered by the Department.

Subject dams are in violation of Maine narrative water quality standards and Maine's anti-degradation statute because the dams do not provide safe and convenient passage for native American eel in the Androscoggin River drainage.

i. The Androscoggin River dams violate Maine's Anti-Degradation Statute (38 MRSA §464(4)(F)(1)).

"Under the current provisions of the Clean Water Act, water quality standards 'consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based upon such uses,' CWA §303 (c)(2)(A), 33 U.S.C. 1313(c)(2)(A), and also require an 'antidegradation policy,' *PUD No. 1*, 511 U.S. 700, 704-705 (1994); *see generally* 40 C.F.R. Pt. 131." -Solicitor General of the United States, Amicus Curiae Brief in Support of Respondent State of Maine at 6, fn. 1.

Maine's Anti-Degradation Statute is required by the federal Clean Water Act. Maine's Anti-

Degradation Statute declares: "The existing in-stream water uses and the level of water quality necessary to protect those existing uses must be maintained and protected. Existing in-stream uses are those uses which have actually occurred on or after November 28, 1975, in or on a waterbody whether or not the uses are included in the classification of the waterbody."

Anti-degradation statutes are the most important legal tools available to citizens and their governments to ensure the goals of the federal Clean Water Act are achieved. Anti-degradation statutes exist to stop governments from allowing rivers which have achieved a specific condition of health from falling back to a lesser condition of health. These statutes declare that once a river achieves a certain, measurable condition of health, governments may not permit activities that will cause the river to become degraded again. In Maine, this objective is achieved through Maine's anti-degradation statute, 38 MRSA §464(4)(F)(1).

This statute declares that all in-stream uses of a river which actually occurred on or after Nov. 28, 1975 must be protected and maintained. American eel have been inhabiting and using the waters of the Androscoggin River drainage for millennia. American eels have maintained a continuous but increasingly tenuous presence in the Androscoggin River since the construction of dams on the river during the 19th century and the massive pollution of the river during the 20th century. American eel and their habitat are a designated use of the entire Androscoggin River watershed which existed on and after November 28, 1975. Maine's anti-degradation statute requires American eel and their habitat in the Androscoggin River watershed to be protected and maintained as an existing, designated use.

The outright killing of pregnant, female eels at subject dams and the inability of baby eels to surmount these dams is not the type of "protection and maintenance" Maine's anti-degradation statute contemplates or allows. Maine BEP's 2 February 2006 findings of fact do not mention this ongoing violation at the Androscoggin River dams even though this violation was extensively cited by the two Petitioners. Violations of Maine's Anti-Degradation Statute cannot be grandfathered by Maine BEP.

ii. The lack of safe and convenient passage for native American eel violates mandatory aquatic habitat standards in Class A, Class B and Class C portions of the Androscoggin River watershed.

Under Maine law, aquatic habitat in Class A waterbodies shall be "as naturally occurs." Aquatic

habitat in Class B waterbodies shall be "unimpaired." Aquatic habitat in Class C waterbodies shall maintain "the integrity of the resident biological community." Maine BEP has no authority to establish aquatic habitat standards. 38 MRSA §464(2)(D) (The Legislature shall have sole authority to make any changes in the classification of the waters of the State). The severe negative impacts of the subject dams on native American eels in the Androscoggin River watershed cause Class A, Class B and Class C waterbodies in the Androscoggin River watershed to fail to meet their aquatic habitat quality standards. The inability of juvenile native American eels to gain access *to* this Class A and Class B and Class C habitat and the inability of adult, female American eels to safely migrate *from* this habitat due to hydroelectric dams violates the narrative water quality standards for Class A, Class B and Class C waters in the Androscoggin River watershed. Maine BEP's 2 February 2006 findings of fact do not respond to this claim.

A map of the Androscoggin River watershed shows the river's entire main-stem is assigned Maine's lowest water quality classification, Class C. Most of the river's tributaries are classified by the Legislature as Class A or Class B. American eels are indigenous to the entire Androscoggin River watershed. Because American eels are highly migratory animals, eels living in Class A and Class B watersheds in the Androscoggin River watershed must migrate many miles upstream and downstream through the main-stem Androscoggin River to reach their natural nursery and spawning habitat. Most of the hydroelectric dams in the watershed are on the main-stem of the Androscoggin River.

The Ellis River enters the Androscoggin near Rumford Point, Maine. The Ellis River has no hydroelectric dams on it. The Ellis River is a Class A river under Maine law. If American eels migrating from Ellis River are killed at dams 60 miles downstream on the river's main-stem, this killing causes the Ellis River to fail to meet its Class A water quality standard. If juvenile American eels cannot reach the Ellis River because of impassable dams 60 miles downstream on the Androscoggin River's main-stem, the Ellis River fails to meet its Class A water quality standard.

Because American eels are highly migratory animals, impacts on their migration to and from Class A waterbodies that occur many miles away directly affects whether these waterbodies attain their legal water quality standards. For this reason, the lack of safe passage for American eels at the Brunswick Dam at the Androscoggin River's head of tide directly affects the water quality standards in the Ellis River more than 60 miles upstream. Maine's water quality standards expressly protect all indigenous fish species, including highly migratory species such as the

American eel. S.D. Warren ("Maine law is settled in this area.") Maine water quality standards do not protect indigenous fish in only one portion of a waterbody. *Id.*

Maine's water quality standards do not only apply to fish species that stay in one place for their entire lives. *Id.* Maine's water quality standards recognize that many of Maine's signature native fish species, such as the Atlantic salmon, American shad, alewife and American eel, must safely migrate back and forth from freshwater to saltwater in order to survive. *Id.* Maine BEP is delegated the authority to determine if legally designated uses of a waterbody are being met --not whether they *should* be met.

The lack of safe and effective passage for American eels at subject dams in the Androscoggin River prevents the designated use of the Androscoggin River water as habitat for indigenous American eel from being achieved. The lawful designated use of the Androscoggin River watershed as habitat for indigenous American eel can only be achieved if safe and effective passage for American eel is provided at the subject dams.

H. No grandfathering of water quality violations exists in Maine law.

In its 2 Feb. 2006 findings of fact at p. 25 Maine BEP admits an effort to grandfather water quality violations caused by the Androscoggin dams by stating: "If these dams were being certified today, the evidence presented by the Petitioners would clearly be relevant to whether fish passage was required in order to provide "reasonable assurance" that water quality standards are met." Through this statement Maine BEP asserts a grandfather clause exists in Maine water quality laws. No clause exists. Compliance with water quality standards and designated uses must be actual and present. If compliance is not actual and present, the goals of the federal Clean Water Act and Maine's water quality standards cannot be achieved. S.D. Warren, 2005 ME 27, ¶ 21.

Maine BEP has recently rejected two separate claims that any grandfather clause exists in Maine's water quality laws and water quality certifications. In 2003, the S.D. Warren Company claimed its Presumpscot River dams are grandfathered from compliance with Maine water quality laws because (1) Warren was not proposing any changes to existing operations of the dams and (2) Maine BEP had approved these same operations in water quality certifications issued decades earlier. Maine BEP rejected Warren's claim that any such grandfathering exists in Maine law. (Maine BEP. Oct. 2, 2003. Findings of Fact and Order Denying Appeal of Water

Quality Certificates for the Presumpscot River Projects). Maine BEP's ruling was affirmed by the Court.

In 2005, Androscoggin dam owner FPL Energy made a nearly identical claim for its Gulf Island and Deer Rips Dams. Maine BEP rejected this claim in its Sept. 21, 2005 Order at p. 26 stating: "FPL Energy's argument that Gulf Island Pond is somehow 'grandfathered' from meeting state water quality standards, including the state's antidegradation policy, has no basis in law. The state's antidegradation policy clearly provides that the DEP may only issue a wastewater discharge license pursuant to state law or approve water quality certification pursuant to federal law if the standards of classification of the water body are met. 38 MRSA §464(4)(F)(3). No water bodies are 'grandfathered' from meeting water quality standards, and no projects --whether paper mills or dams --are 'grandfathered' from appropriate regulation if determined to be causing or contributing to the failure of any water body to meet water quality standards."

Maine BEP admits the American eel is an indigenous species of the Androscoggin River watershed. Maine BEP admits none of the subject dams provide safe and suitable passage for American eel. Maine BEP admits these dams are likely causing mortality to adult, female American eels as they attempt to swim to the Atlantic Ocean to give birth. Maine BEP does not contest the above conditions existed when it issued water quality certifications for these dams. Maine BEP admits these facts would be "relevant" if the Maine BEP was considering new water quality certifications for these dams. By these admissions, Maine BEP is attempting to claim the Androscoggin River dams are grandfathered from complying with Maine water quality standards.

Such grandfathering nullifies applicable water quality standards in statute. Only the Maine Legislature can change Maine's water quality classification laws and water quality standards. 38 MRSA §464(2)(D) (The Legislature shall have sole authority to make any changes in the classification of the waters of the State)

I. Water quality certification orders are not *res judicata* if they allow violations of Maine water quality standards.

Maine BEP notes on 2 February 2006 at p. 25 that Maine citizens had the opportunity to bring concerns about American eels to the BEP when the various Androscoggin River dams' water

quality certifications were issued. Because no citizens did so, BEP implies the certifications and any water quality violations embodied within them are now *res judicata*. 38 MRSA §341-D(3) and Ch. 2 §27 of Department rules allow the Maine BEP and DEP Commissioner, after notice and public hearing, to modify water quality certification orders if evidence shows this is necessary to prevent violations of Maine water quality standards.

If water quality certification orders were *res judicata* in the way suggested by Maine BEP, the State of Maine would be unable to enforce its own water quality statutes on a particular waterbody for the entire term of a FERC license. This would nullify the legal water quality classifications and designated uses established by the Maine Legislature for the Androscoggin and Little Androscoggin Rivers and their tributaries. Only the Maine Legislature can change Maine's water quality classification law. 38 MRSA §464(2)(D).

J. FERC regulations and the Federal Power Act do not prohibit Maine from modifying water quality certification orders under 38 MRSA §341-D(3) and Ch. 2 §27 of Department rules.

In its 2 Feb. 2006 findings of fact Maine BEP suggests it is "highly questionable" Maine is allowed under federal law to modify existing water quality certification orders to stop violations of water quality standards unless the original orders contain a specific "re-opener" clause allowing such modifications. *See*: Maine BEP Findings of Fact at p. 23: "Thus, none of the FERC licenses issued for the projects contain conditions reserving the right of the Department to 'reopen' the certification to include passage for eels.'' *See*: Findings of Fact at p. 24: "The Board's statute permits it to modify a certification after a hearing if certain criteria are met. The legal effect of any such action, however, in the absence of specific reopeners in the water quality certifications, incorporated into the FERC licenses for these projects, is highly questionable."

Such a speculative, hypothetical claim has no place in a Maine BEP findings of fact under Ch. 2 §27. *See*: Hannum, 2003 ME 123, ¶15 n. 6, 823 A.2d at 770 ("fact-finders must rely on evidence, not speculation, in fact-finding."). The U.S. Supreme Court in PUD No. 1 rejected the claim that a *potential* conflict with FERC can prevent a state from enforcing its own statutory water quality standards:

"[T]he Court is unwilling to read implied limitations into §401 based on petitioners'

claim that a conflict exists between the condition's imposition and the Federal Energy Regulatory Commission's authority to license hydroelectric projects under the Federal Power Act, since FERC has not yet acted on petitioners' license application and since §401's certification requirement also applies to other statutes and regulatory schemes."

The U.S. Supreme Court in PUD No. 1 states: "A State may impose conditions on certifications insofar as necessary to enforce a designated use contained in the State's water quality standard." *Id.* In American Rivers v. FERC, 129 F.3d 99 (2d Cir. 1997) the Court prohibited FERC from rejecting, amending or modifying conditions in §401 water quality certification orders, writing at 111:

"We have no quarrel with the Commission's assertion that the FPA [Federal Power Act] represents a congressional intention to establish a broad federal role in the development and licensing of hydroelectric power. Nor do we dispute that the FPA has a wide preemptive reach. The CWA [Clean Water Act] however, has diminished this preemptive reach by expressly requiring the Commission to incorporate into its licenses state-imposed water quality conditions."

In S.D. Warren, Maine's Court discusses this topic at ¶27: "Under Maine law the BEP has the authority to do that which it is granted authority to do, either expressly or by implication when that authority is essential to the full exercise of its powers specifically granted." And ¶28: "The BEP is expressly granted the authority to issue section 401(a)(1), 33 U.S.C.A. §1341(a)(1), certifications pursuant to M.R.S.A. §464(4)(F)(1-A). Considering the purpose of Maine's water quality standards, stated at 38 M.R.S.A §464(1), the authority to include 'reopeners' is essential to the 'full exercise of powers specifically granted' to the BEP. *See Hallissey*, 2000 ME 143, ¶11, 755 A.2d at 1072. This authority is essential because if the conditions are not as effective as planned, the water quality standards will not be met and the BEP's goal to 'restore and maintain the chemical, physical and biological integrity of the State's waters ...' will not be achieved during the forty-year term of the FERC license. The Board's interpretation of 38 M.R.S.A. §464 as implicitly authorizing the inclusion of 'reopeners' is reasonable and the statute does not plainly compel a contrary result."

Maine BEP's argument contains three additional flaws. Maine BEP's argument means Maine has no right to modify water quality certification orders. This would nullify Maine BEP's authority under 38 MRSA §341-D(3) to modify water quality certification orders. Since Maine BEP on

January 19, 2006 agreed to schedule a public hearing under 38 MRSA §341-D(3) to do this at four dams on the Kennebec River, Maine BEP contradicts its own claim. Maine BEP's argument would prevent Maine from enforcing its own statutory water quality standards for the entire term of a FERC license --no matter how severe or extensive the water quality violations. Such an interpretation leads to unreasonable results. *See*: Town of Eagle Lake v. Commissioner of Dept. of Education, 2003 ME 27, ¶7. (The court will avoid results that are "absurd, inconsistent, unreasonable or illogical.") The argument grandfathers violations of water quality standards for the entire 40-50 years of a FERC license. In an Order dated 21 September, 2005 Maine BEP declared no such grandfathering right exists. *Id.*

The most chilling portion of Maine BEP's claim is its suggestion that Maine has only "one bite at the apple" when issuing a water quality certification order for a dam with a 40-50 year license term. If Maine BEP makes an error or omission in a water quality certification, as Petitioners assert has occured on the Androscoggin River , Maine citizens are stuck with the consequences of this error for 40 years or more. In practice this could mean that Maine's water quality statutes are rendered null and void in a watershed for 40 years; that severe fish kills could occur for 40 years; and that a native fish species could become extinct due to these fish kills.

Maine BEP's claim is "untested" only because the BEP can find no instance where FERC refused to honor state modifications of certificate orders or any case where a Court refused to compel FERC to do so. The courts in PUD No. 1 and American Rivers v. FERC require FERC to include without modification state §401 water quality certification conditions into FERC licenses and thus refute Maine BEP's speculative argument. The most likely (but unstated) source of Maine BEP's concern on this topic is a recent claim by several Androscoggin dam owners that Maine cannot modify previously issued §401 certifications because the Federal Power Act only allows license amendments with the mutual consent of FERC and the licensee. FPA §6, 16 U.S.C. 799. Such a claim would mean licensees and FERC have unquestioned power to nullify the designated uses in the Clean Water Act, all of the states' rights under §401 of the Act and all applicable state water quality statutes for the affected waterbody. Federal law does not allow this. Maine asserts the same to the U.S. Supreme Court: "Federal agencies must nonetheless incorporate the conditions of a state issued certification in any license or permit, 33 U.S.C. §1341(d), and cannot review the substance of state-imposed certification conditions, *American Rivers v. FERC*, 129 F.3d 99, 107-112 (2nd Cir. 1997)." Maine Respondent's Brief at 32, fn. 23. *See also*: "[T]here is no statutory language or legislative history exempting FERC licenses from §401, and as discussed *infra*, the contrary is true." *Id.* at 7, fn. 6.

In its 2 Feb. 2006 findings of fact Maine BEP implies that if Maine does not "get it right the first time" when issuing water quality certificate orders during a federal dam re-licensing, the receiving waterbodies are victim to any and all errors or omissions in the certification for the entire 40-50 year term of the FERC license, even if those errors cause annual fish kills and other massive violations of state water quality standards. If this were so, the purpose of §401 and the entire Clean Water Act would be defeated (*ie*. a simple typographical error in a state §401 certification could cause a waterbody to be out of attainment of Clean Water Act standards and state water quality standards for the entire 40-50 years of a FERC license). Such an interpretation leads to unreasonable results. *See*: Town of Eagle Lake, ¶7. (The court will avoid results that are "absurd, inconsistent, unreasonable or illogical.")

On a practical basis, it is highly doubtful FERC would summarily reject modification of a §401 certification if credible evidence showed the modification was necessary to prevent fish kills and other violations of state or federal water quality standards. Maine BEP suggests the worst possible scenario is the most likely scenario. Maine BEP fails to consider the much more likely scenario where FERC would incorporate modifications of §401 water quality certifications into federal licenses if evidence showed the modifications were necessary to prevent severe fish kills and other violations of state water quality statutes. This is why the Maine Supreme Court instructed in Hannum that "fact-finders must rely on evidence, not speculation, in fact-finding."

IV. STANDARD OF EVIDENCE.

Maine BEP admitted on 2 February 2006 all of the necessary factual evidence required under Ch. 2 §27 to warrant a public hearing on this topic. Maine BEP admitted: **(a)** American eel exist today throughout the Androscoggin River watershed; **(b)** No dams in the Androscoggin River watershed are equipped with safe and effective upstream and downstream passage facilities for American eel; **(c)** The lack of safe downstream passage for American eels at these dams is likely causing mortality to pregnant, female American eels attempting to reach the Sargasso Sea to give birth.[7] A *de minimis* argument on the impact of the dams on American eels is refuted by the severe cumulative impact of the numerous dam passages eels must undertake to migrate up and down the Androscoggin River.

The State of Maine, in its Respondent's Brief to the United States Supreme Court, admits all of

[7]Maine BEP's 2 February 2006 findings of fact are completely silent on factual evidence provided by Petitioners showing the acute need for safe upstream passage for juvenile American eels at the Androscoggin Dams.

the legal evidence required under Ch. 2 §27 to warrant a public hearing on this topic. In this Brief, Maine admits that hydroelectric dams cause pollution by preventing migratory fish from safely reaching their spawning and nursery grounds and this blockage violates Maine's statewide water quality standards. In its 2 February 2006 findings of fact, Maine BEP admitted that evidence in this Petition, since it references the same evidence provided by earlier petitioners, would be "relevant" if Maine BEP were considering new water quality certifications for the Androscoggin River dams. Based upon these admissions by the State of Maine, the only possible argument Maine BEP can produce to reject our proffer of evidence under Ch. 2 §27 is that existing water quality violations on the Androscoggin River are grandfathered and are immune from regulatory action. No such grandfathering or immunity exists.

A Maine BEP decision to deny a Ch. 2 §27 petition for public hearing is a final agency action. Such an action must be accompanied by findings of fact. The Maine Supreme Court has issued explicit and detailed rulings on what constitutes a legally acceptable finding of fact. *See*: Street v. Board of Licensing of Auctioneers, 2006 ME 6, ¶8; Uliano v. Board of Enviromental Protection , 2005 ME 88, ¶20; Widewaters Stillwater Co. LLC v. BACORD., 2002 ME 27, ¶11, ¶13, ¶15; Kurlanski v. Portland Yacht Club, 2001, ME 147. 782 A.2d 783, ¶7, ¶13; Christian Fellowship and Renewal Center v. Town of Limington, 2001 ME 16, ¶12, 769 A.2d 834, 838; Wells, 2001 ME 20, 771 A.2d at 375, ¶10.

The Court reviews an agency's decisions for findings not supported by substantial evidence in the record. Kurlanski v. Portland Yacht Club, 2001, ME 147, ¶7, 782 A.2d 783. The Court has defined substantial evidence as 'such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.' CLF v. Town of Lincolnville, 2001 ME 175, ¶6 quoting Gorham v. Cape Elizabeth, 625 A.2d 898, 903 (Me. 1993). *See:* Widewaters Stillwater Co. LLC v. BACORD., 2002 ME 27, ¶13: "When a board's findings of fact are insufficient to apprise us of the basis of the Board's decision, it is impossible for us to determine whether that decision is supported by substantial evidence." *See*: Street v. Board of Licensing of Auctioneers, 2006 ME 6, ¶8, citing from White v. Zela, 1997 ME 8, ¶3, 687 A.2d 645, 646: "A finding of fact is clearly erroneous if no record evidence exists to support it or if it is based on "clear misapprehension of the evidence." *See*: Uliano v. Board of Enviromental Protection , 2005 ME 88, ¶20 citing from Hannum, 2003 ME 123, ¶12, 823 A.2d at 769. "Concomitantly, the Board had an affirmative obligation to set out in a decision its reasons for the denial of the application and to state its reasons with sufficient specificity to permit understanding and meaningful appellate review."

If Maine BEP concludes a proffer of evidence is "insufficient" or "unpersuasive" Maine BEP is

compelled to explain, based on evidence in the record, how it reached this conclusion. Otherwise Maine BEP could establish a standard of evidence no amount of evidence could satisfy. The Maine Supreme Court has defined substantial evidence as 'such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.' CLF v. Town of Lincolnville, 2001 ME 175, ¶6 quoting Gorham v. Cape Elizabeth, 625 A.2d 898, 903 (Me. 1993).

Based upon the Maine BEP's own admissions, a reasonable mind would find the proffer of evidence made herein is adequate to support the conclusion that safe and convenient passage for American eel is necessary and beneficial at the Androscoggin dams.

1. No safe and convenient passage now exists for American eels at these dams.

2. Maine BEP admits it is likely that adult eels are being killed in the turbines of these dams due to the lack of safe passage.

3. Maine's Supreme Court has fully settled the issue of whether the lack of safe eel passage is a violation of Maine's statutory water quality standards.

4. Petitioner presents here uncontested evidence, affirmed by Maine BEP itself, showing no safe and convenient passage for American eels exists at the Androscoggin dams, that adult eels are being killed in the dam turbines and juvenile eels are being prevented from migrating past the dams into their native habitat.

Maine BEP does not assert that American eels now have full and free passage up and down the Androscoggin River. Maine BEP does not assert the Androscoggin dams now provide safe and convenient upstream and dowstream passage for American eels. Maine BEP has not provided evidence showing the impact of these dams on American eel is minimal. Maine BEP has not provided evidence showing safe and convenient passage for American eel is not necessary or beneficial at the Androscoggin dams. Maine BEP has not produced any evidence showing it is legally prohibited from modifying water quality certifications for the Androscoggin River dams to require immediate safe and convenient passage for American eels.

For the above reasons Petitioners request Maine BEP schedule a public hearing on this matter pursuant to Ch. 2 §27. Statements of all petitioners attached. Petitioners incorporate by reference into this petition the prior Androscoggin and Kennebec eel passage petitions

submitted by Friends of Merrymeeting Bay and Douglas Watts to the BEP and the records from hearings conducted on those petitions. Petitioners also incorporate by reference into this petition, proceedings filed in the Appeal of Douglas Watts v. Maine BEP, Superior Court Docket AP-06-19. Petitioners agree that contact persons for correspondence regarding this Petition are:

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