

The following is an abridged version of three research articles:

- [*The Importance of Defining Technical Issues in Interagency Environmental Negotiations*](#)
- [*Power Distribution in Complex Environmental Negotiations: Does Balance Matter?*](#)
- [*Desire to Bargain and Negotiation Success: Lessons About the Need to Negotiate from Six Hydropower Disputes*](#)

Each of the articles concerns research findings from a comparative case study of hydropower consultations that involved the US Fish and Wildlife Service. The cases were chosen using a “most similar systems design” and met the following criteria:

- 1) Case involved at least three and no more than fifteen parties.
- 2) Decision was negotiated in the context of the FERC licensing or relicensing process.
- 3) Case involved riparian resources as the main focus of the negotiation.
- 4) Project was located in either the northeaster or northwestern United States .
- 5) No third party imposed its will on the negotiators before they could reach agreement .
- 6) Actual negotiations did not rise above the regional office level for the involved agency.
- 7) Issues were resolved after the enactment of PURPA and ECPA.

Personnel from USFWS field offices and state fish and game agencies nominated hydropower consultations that they thought met the criteria. From the twenty-six cases nominated, USFWS personnel were then asked to select, from that list, cases that they thought were successful. Six cases were selected: Ashton-St. Anthony, Cataract, Eastman Falls, Koma Kulshan, Oswegatchie, and Pit 3,4,5 (see Table 1. and 2.).

Table 1. Major features of each project

Project Name	Location	Length of consultation	Number of parties interviewed	Project Description
Koma Kulshan	Northwestern Washington (Sandy/Rocky/Sulphur Creeks)	10 years (1979-1989)	11	Project consists of diversion structures on Rocky and Sulphur Creeks, an 18,810-ft-long penstock, a power-house containing a generating unit with a rated capacity of 12,000 kW and appurtenant facilities.
Eastman Falls	New Hampshire (Pemigewasset River/Merrimack River)	6 years (1981-1987)	5	Dam is located within the town of West Franklin, NH, on the Pemigewasset River just upstream from the confluence of the Pemigewasset and Winnepesaukee rivers
Oswegatchie	New York (Oswegatchie River)	12 years (1980-1992)	8	Series of six dams and hydropower facilities. Four of the six located in the upper basin; other two 70 miles downstream near the river’s mouth.

Cataract	Maine (Saco River)	5 years (1984-1989)	8	Series of four facilities (Cataract, Upper York, Springs, and Bradbury dams) constructed adjacent to two islands in the Saco River. Located 5 river-miles from the ocean, it is the first of a series of six projects on the Saco River.
Pit 3,4,5	Northern California (Pit River)	13 years (1980-1993)	5	Series of three diversion structures and power stations. Negotiations focused on Pit 3 reach, which is bypassed by more than a 4-mile-long penstock running underground from Britton Reservoir (Pit 3 dam) to the powerhouse at the head of reach 4.
Ashton-St. Anthony	Idaho (Henry's Fork of the Snake River)	8 years of 1992 (ongoing)	11	Project is divided into two developments on the Henry's Fork of the Snake River: a reservoir, dam, and powerhouse near the city of Ashton, ID, and a diversion and electric power generating facility within the limits of the city of St. Anthony, ID.

Table 2. Main issues addressed in each project

Project name	Main Issues
Koma Kulshan	Flow, sediment, access
Eastman Falls	Flow, fish passage, recreation quality
Oswegatchie	Flow, recreation access and quality, water quality
Cataract	Flow, fish passage, access, water quality
Pit 3,4,5	Flow, eagle habitat, wetland protection, riparian area protection, reservoir levels, tribal lands, access
Ashton-St. Anthony	Flow, fish passage, turbine mortality, reservoir fishery, wetlands, riparian zone protection, raptor nesting.

In 1992-1993 Nina Burkardt, Lee Lamb, and Jonathan Taylor of SEIAS (Social, Economic, and Institutional Analysis Section—now PASA, Policy Analysis and Science Assistance) conducted structured personal interviews of those who had been involved in the negotiations of the six cases. Respondents included representatives from state and federal fish and wildlife agencies, the utility, local interest groups, and tribes. Forty-two individuals were interviewed. Interviews were tape-recorded and later transcribed.

Of the six projects evaluated, two were considered successful (Eastman Falls and Koma Kulshan) and four were considered minimally successful (Oswegatchie, Cataract, Ashton-St. Anthony, and Pit 3,4,5).

The criteria to evaluate success included:

- 1) Parties recognized that an agreement was reached.
- 2) The agreement included a plan of implementation and post-construction monitoring.

3) There was a willingness to enter into future negotiations with the same parties. Respondents rated success at more than 7 on a 10-point scale (where 1 meant no success and 10 meant fully successful).