

**POWER
BRANCH**

The graphic consists of a central puzzle piece with the text "POWER BRANCH" inside. The puzzle piece is surrounded by four icons: a power transmission tower (top left), a dam (top right), a fish (bottom left), and a scale of justice with the flags of the United States and Canada (bottom right). The puzzle piece is outlined in black and has a white background.

River Basins of the Pacific Northwest

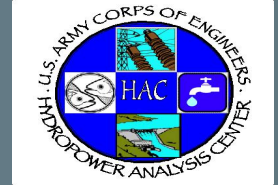
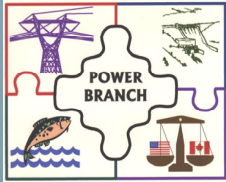


Power Branch

MAJOR RESPONSIBILITIES

- Main functional element for hydropower operational planning for Corps reservoirs in the North Pacific Region (13,000 MW out of 21,000 MW national total).
- Develop annual hydro operating plans of Corps and Treaty projects
- Coordinate regional power planning studies for optimum Columbia River System regulation
- Support Corps-BPA Joint Operating Committee on hydropower rehabilitation
- Conduct/review hydropower studies for the Corps (regional, national, international).

Power Branch STAFF COMPOSITION



OPERATIONAL PLANNING

**HYDROPOWER ANALYSIS
CENTER**

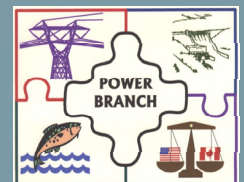
OPERATIONAL PLANNING UNIT

Columbia
River
Treaty

Pacific
NW
Coordination
Agreement

Power
Studies

MODELING



COLUMBIA RIVER TREATY

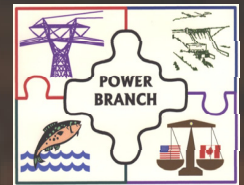
INTERPRET/IMPLEMENT

- Principles & Procedures
- Entity Agreements

COORDINATE ANNUAL PLANNING

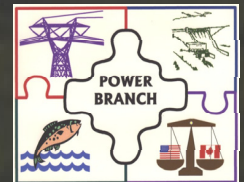
- Assured Operating Plan
- Determination of Downstream Power Benefits
- Detailed Operating Plan

- Support to CRT Operating Committee



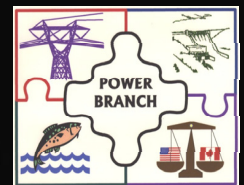
PACIFIC NW COORDINATION AGREEMENT

- **Coordination / Implementation / Rights & Obligations**
- **Planning (Data submittal / Actual Energy Regulations / Refill Studies)**
- **Operation**

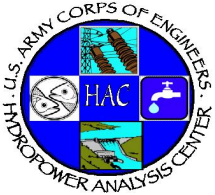


HYDROREGULATION PLANNING

- **Reconnaissance & Feasibility, PAC**
- **Drawdown: Lower Snake River Feasibility; JDA Reconnaissance**
- **Libby Variable Q**
- **NEPA and ESA: Willamette Steelhead, White Sturgeon, Bull Trout, Salmon BiOp '95, '98**
- **BON Min. Gap Runner, TDA Major Rehab, Cougar/Blue River**
- **Regional Power Planning**



HYDROPOWER ANALYSIS CENTER OF EXPERTISE



HDC Support

- Major Rehab
- Turbine Rewind

Work for Others

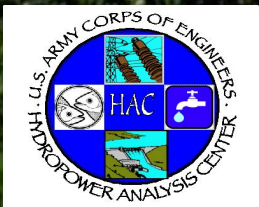
- Power values
- Cost Allocation
- System Studies
- Other Studies

Special Activities

- Procedures
- Hydro Manual
- PEBCOM
- FERC Review
- COE/BPA JOC
- Overseas

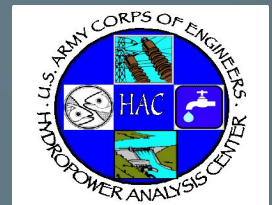
HYDROPOWER EVALUATION

- Power Values
- Cost (Re)-Allocation
- FERC (Re)-Licensing
- Pumped Storage Studies
- Power Plant Rehabilitation
- Major River System Studies



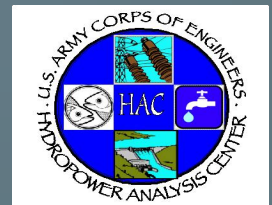
HYDROPOWER ANALYSIS CENTER

- Kerr Supplemental McNary Rehab
- HYSSR/HALLO FERC
- Kainji Dam, Nigeria Center Hill
- Old Hickory Fort Randall
- Narrows Rewind Missouri Res.Reg.Man.
- Hydro Manual Arkansas River
- PEBCOM COE-BPA JOC



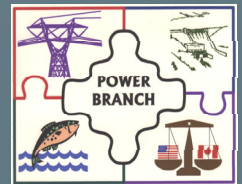
ASSISTANCE SERVICES

- **TO DISTRICTS:** *Willamette BiOp; Cougar Selective Withdrawal; Upper Baker; GCL-CHJ Power Transfer; Lower Granite Operation Review; Major Rehab Workshop*
- **TO COE-BPA JOC :** *“Barton Report”& Workshop; Liquidated Damage Policy; JOC & Sub-Committee Activities ; website; Self-Assessment*
- **TO HQ:** *Field Review Activities (CW O&M); Nonfederal Hydro Development Identification; Hydropower Brochure; Overseas*



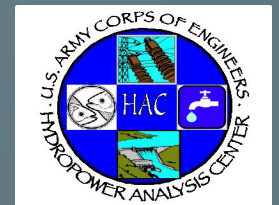
Planning Unit Outlook

- Need top-notch regulators + stable staff to reassert as premier modelers in PNW; participate at every study level; & have all studies completed on time and fully checked.
- Need to adequately train and retain staff
- *The Corps needs to accomplish its mission and fulfill its CRT and PNCA responsibilities.*



Hydropower Analysis Center Outlook

- Must be Self-supporting.
- New trends: Rehab, International
- Reduced O&M funding
- Increased PMA funding Roles





The End