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Northwestern Division



# Corps of Engineers Response to the ISRP review of AFEP

NPCC Meeting July 14, 2004

Spokane, WA



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# AFEP Program

- Purpose: To produce scientific information to assist the Corps in making engineering, design, and operations decisions to support safe, efficient passage of fish past the eight mainstem Columbia and Snake River hydroelectric projects.



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# Complexity of AFEP

- Projects occur across multiple years
- Studies are often very site specific
- Similar problems occur at different projects but often require different solutions
- Studies are often dictated by river conditions



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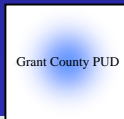
# Complexity of AFEP (cont.)

- AFEP Research is often supported by other CRFM projects
- Studies are always subject to fish requirements
- Studies are often constrained by the calendar
- Coordinated with many outside interests



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# External Organization





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# How Research Results Are Used



- Baseline Information
- Decision Support
  - Hydroproject Configuration
  - Prototype Development
  - Operations
- Monitoring
  - Support of Biological Opinions
  - Confirmation of Decisions
    - Post Construction Evaluation



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# The ISRP Review

- What we were expecting
  - Review of the John Day, Estuary and Ice Harbor Research Projects
- What was delivered
  - Overall review of the program and processes



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# Corps Response to the ISRP Conclusions

- The Corps' fish program is quite complex
- Looking at one year of the program provides only a limited look into AFEP
- We believe that the ISRP had some valuable input
- We believe that the ISRP missed the mark at times





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# Responses to Conclusions and Recommendations

- (C&R 1) Long Term Strategic Planning
  - The Corps agrees that improving the long-term planning process would improve the program and provide greater transparency
  - Next Step
    - We are having discussions with Council Staff regarding better coordination with respect to long-term plans
    - We are continuing development of these plans



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# Responses to Conclusions and Recommendations

- (C&R 2) SRWG Membership and Charter
  - The Corps agrees that including researchers in the SRWG could improve the process, however;
    - Historically researchers were more involved but were distanced in an attempt to ensure non-partial voting members
    - Researchers are currently invited into this process as appropriate
  - Next Step
    - Review the Program with the fish managers



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# Responses to Conclusions and Recommendations

- (C&R 3) Incomplete Proposals
  - The Corps agrees that many proposals were insufficient or not complete enough for typical ISRP review, however;
    - Preliminary Proposals are often incomplete by nature
    - Many proposals are updated late in the year to reflect new, incoming data (e.g. river conditions, research results, etc.)
    - Proposals that can respond to changing conditions and new information are a strength of the program
  - Next Step
    - Attempt to rework the program to ensure that “independent” research proposals are as complete as possible



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# Responses to Conclusions and Recommendations

- (C&R 4) Lack of Independent Scientific Review
  - Although small scale reviews typically occur, the Corps agrees that pre-proposals do not always lend themselves well to independent scientific review, however;
    - Technical review is performed by many outside agencies
    - It is important for reviewers to be familiar with the hydropower system
    - It is important for reviewers to be familiar with unique fish research techniques and protocols
  - Next Step
    - Look into possibly contracting out some level of independent review
    - Look into project specific proposals to fix a program



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# Responses to Conclusions and Recommendations

- (C&R 5) Current AFEP Proposal Review has little bearing on selecting proposals
  - The Corps agrees, however;
    - AFEP prioritizes research needs based on the research summaries
    - Pre-proposals are worked through an iterative process to get final proposals that meet the research need
    - If final proposals do not meet program needs or money is not available, they are either deferred or remain unfunded
  - Next Steps
    - None anticipated



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# Responses to Conclusions and Recommendations

- (C&R 6) Lack of Coordination between AFEP and the Council's program
  - The Corps agrees that opportunities for better collaboration exist, however;
    - BPA personnel attend all AFEP planning and information meetings
    - Council staff often attend AFEP meetings
    - Corps tracks the Council's Program
    - The programs have different purposes
  - Next steps
    - The Corps will better communicate AFEP efforts with the Council
    - The Corps will work with the Council to better coordinate programs



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# Responses to Conclusions and Recommendations

- (C&R 7) Site Specific vs. Mechanism-Oriented Studies
  - The Corps disagrees that mechanism oriented studies are under funded
    - AFEP's primary purpose is to study site specific fish issues
    - Recent mechanistic studies include Turbulent flow, Numerical Fish Surrogate, 3-D Acoustic tagging, "D", etc...
    - Few proposals were solicited for 2004, therefore it appeared as though little work was in progress
  - Next Steps
    - None



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# Response to Segregating Research

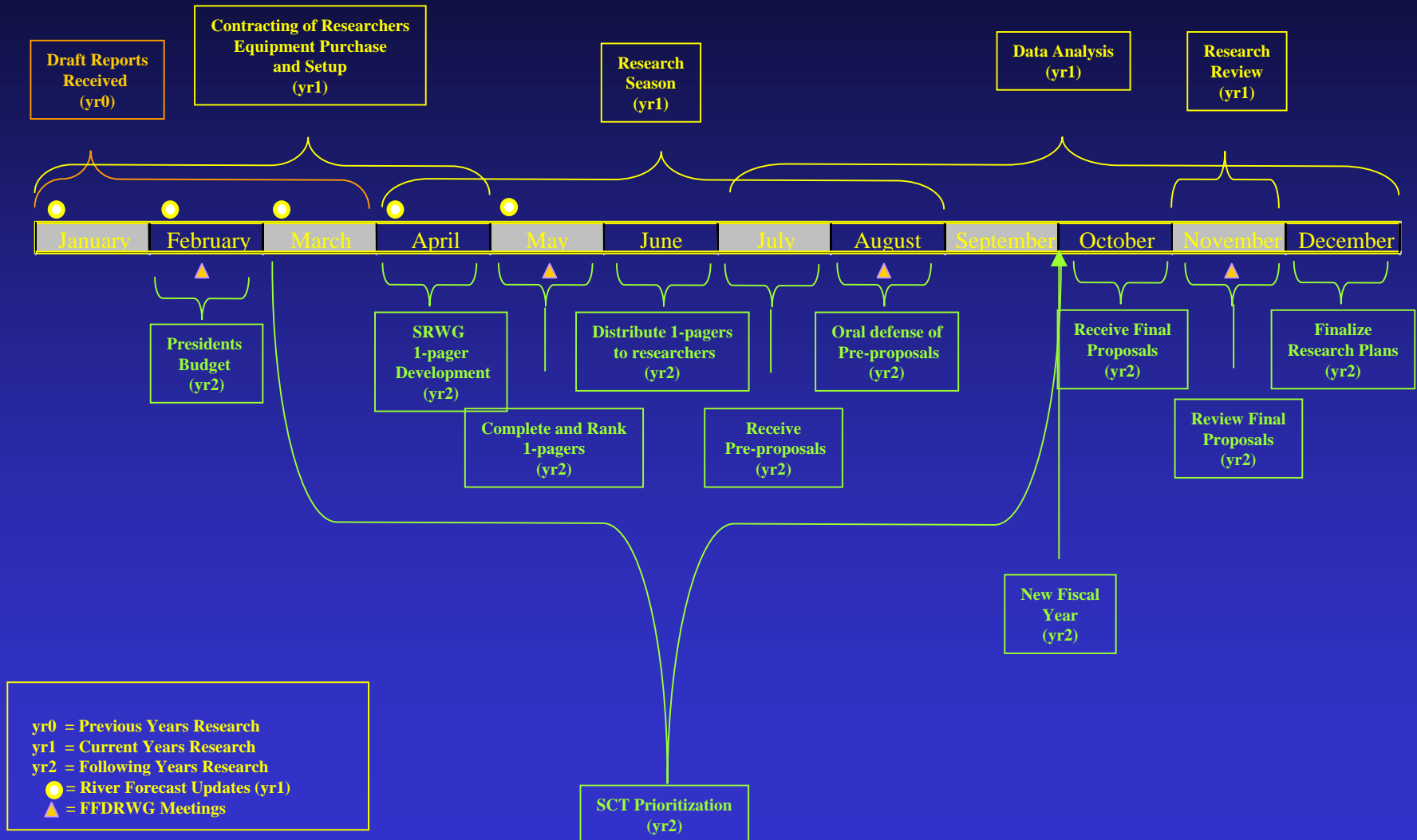
- Segregating research elements into dependent and independent categories
  - AFEP works on a tight timeline
  - Equipment purchase and fish timing are key
  - Deciding on whether or not to fund survival studies cannot be pushed out into Mar/Apr





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# AFEP General Timeline





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# Corps' Conclusions

- There were some suggestions that could help to improve our program
- The review provided an incomplete picture of the Corps' overall fish program
- Despite different purposes, the AFEP program should be well coordinated with the Council's program
- The Corps will work with the Council towards better coordination