



Montana Fish, Wildlife & Parks

Policy for approval and prioritization of wildlife research projects by the FWP Wildlife Division.



Ken McDonald
Wildlife Division Administrator

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Date

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Ken McDonald
Wildlife Division Administrator

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Montana Fish, Wildlife, and Parks Wildlife Division research project approval process: summary

This document outlines the Montana Department of Fish, Wildlife, and Parks, Wildlife Division (hereafter FWP Wildlife) policy for prioritizing and approving research projects that occur within the boundaries of the state of Montana. *FWP Wildlife defines research as short-term (<5 years) research projects, long-term (5+ years) research projects, university-related MS/PhD/ Post-Doc studies, special projects, and technical support for management and conservation investigations. This definition of wildlife research includes every new survey, study or project except established, ongoing monitoring of the status or trend of wildlife populations, habitats, or communities that directly supports FWP wildlife conservation and management programs and decisions.*

The mission of the FWP Wildlife research program is to provide reliable information that helps conserve wildlife populations for the long-term enjoyment of Montanans. We do this by using the scientific method to conduct applied wildlife research, monitoring wildlife health, collecting specialized data, and analyzing information to produce robust inferences directly relevant to wildlife conservation. FWP Wildlife research also facilitates undergraduate and graduate student training, helping to educate and shape future generations of wildlife professionals in the application of science and technology to real world, tangible wildlife conservation issues in Montana.

FWP Wildlife strives to promote, solidify, and enhance effective and responsible wildlife conservation and management in Montana for the current and future benefit of Montana wildlife and the Montana public. To maintain and enhance the close connection between Montana's public and wildlife resources, FWP Wildlife strives to provide and disseminate dependable knowledge gained through research that can be used as a basis for resource management programs and decisions. Recognizing that this sort of knowledge can come from different sources, FWP Wildlife distinguishes between the following three types of research projects in order to provide appropriately variable avenues for FWP participation in research ventures.

1. Wildlife research projects that are external to FWP Wildlife, and the investigators seek a permit and/or Institutional Animal Care and Use Committee (IACUC) review as required to complete their project
2. Externally funded wildlife research projects in which the investigators seek review of methods or objectives, sanction, and/or philosophical support from FWP Wildlife, in order to ensure that a project is relevant and useful for agency programs, including projects that will take place on FWP-owned lands
3. Wildlife research projects that require FWP Wildlife resources, including staff time, equipment, data collected by FWP staff, and/or money from any FWP project account, to complete.

The sections that follow outline the processes for evaluating and approving projects that are classified under 1, 2, or 3 above. Figure 1 can be used to aid in determining which section(s) of this policy apply to a particular research project.

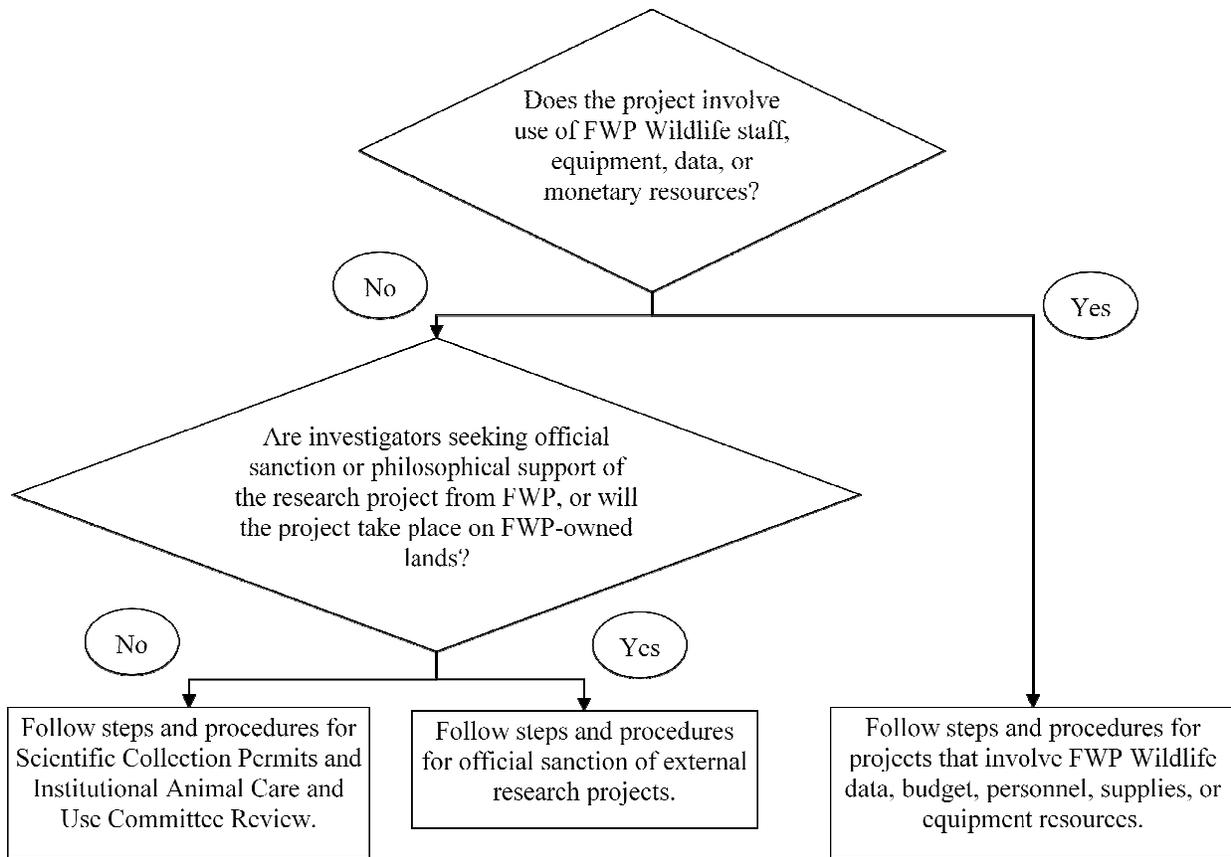


Figure 1. Process for determining which section(s) of this policy applies to a research project.

Permits and IACUC review for external research projects

A scientific collection permit from FWP Wildlife is required for all projects that include capture and handling of wild animals in Montana, including research projects. An Institutional Animal Care and Use Committee (IACUC) review is also required for all projects that include capture and handling of wild animals in Montana, though this review may be completed external to FWP Wildlife so long as documentation of the review can be provided. The steps for completing this process are as follows.

Permit applications are obtained from and submitted to FWP Wildlife. A copy of the permit application can be found on the FWP website.

<http://fwp.mt.gov/doingBusiness/licenses/wildlifeCollector.html>. Permit applications must be submitted to fwpwld@mt.gov.

1. Permits are not transferable.
2. Applications are reviewed according to the below schedule:

Permit applications received....	Jan & Feb	March & April	May & June	July & August	Sept & Oct	Nov & Dec
Permits reviewed....	March	May	July	Sept	Nov	Jan
Permits issued no later than....	April 15	June 15	August 15	Oct 15	Dec 15	Feb 15

3. Permits must be in permittee’s and/or subpermittees possession during collection or banding.
4. Any violation of the conditions of a permit may result in denial of future permit applications.
5. Scientific collection and research permits are issued annually.
6. Multi-year projects can be generally approved for the life of the project; however annual renewals are required via email requests to fwpwld@mt.gov. The annual renewal process provides a “check in” between the Department and permittee.
7. Annual reports are required under the provisions of granted permits by December 31 of the year issued. *Renewals and new permits will not be issued until the report for the previous year’s work has been submitted and accepted.* Deadline extensions for annual reports will be granted only for projects that include winter work that runs through the month of December. Email requests for an extension may be sent to: fwpwld@mt.gov. A copy of the reporting process and form for collector permits and FWP IACUC applications can be found on the FWP website. Annual reports must include:
 - i. Species and number of species handled,
 - ii. Date handling occurred,
 - iii. Handling locations including (GPS location in UTM coordinates, or latitude longitude if possible; legal description in Township, Range, Section, and Quarter Section; otherwise, a detailed descriptive location),

- iv. Known biological information including sex, age, cause of death, etc.,
 - v. Information used will be for administrative purposes, and to supplement location information in the Montana Natural Heritage Program on species of concern in Montana,
 - vi. Specific information will not be published or made available to the general public without permission of the permit holder.
8. According to Sec. 87-2-806, Montana State Law provides for denial of permit for any of the following:
 - i. The applicant is not qualified to make the scientific investigation;
 - ii. The proposed collecting is not necessary for the proposed scientific investigation;
 - iii. The method of collecting is not appropriate;
 - iv. The proposed collecting may threaten the viability of the species; or
 - v. There is no valid reason or need for the proposed scientific investigation.
 9. FWP Wildlife may place special authorizations or special requirements and limitations on any permit as necessary to protect the species to be collected, other species that may be affected and their habitats or to preserve the integrity of the scientific collection/bird banding methods.
 10. Research projects that require capture and/or handling of wild animals must comply with the Animal Welfare Act 1966 and its amendments 1970, 1976, 1985 and 1990. An approval of animal capture, handling and care protocols must be provided from an approved IACUC. Applicants can apply for a review by the FWP IACUC if one is not available through other means. Capture or handling activities must not begin until an official review has been completed. If you have obtained an animal care and use committee approval through an agency other than Montana FWP, please submit a copy of that approval along with your permit application.
 - i. A copy of the IACUC review application can be found on the FWP website. <http://fwp.mt.gov/doingBusiness/licenses/wildlifeCollector.html>. IACUC applications to be reviewed by the FWP IACUC can be emailed to fwpwld@mt.gov.
 11. Projects that have been approved by the FWP IACUC must report mortality events, injuries or adverse reactions observed during capture events and within 30 days of post-capture monitoring to the IACUC by January 31 following the year that IACUC approval is granted.
 - i. A copy of the reporting process and form for collector permits and FWP Institutional Animal Care and Use Committee approvals can be found on the FWP website.
 12. Students or associates under the supervision of the principal investigator must have specific training in the collection/banding methods proposed in the application and be listed as a subpermittee.
 13. All of the above provisions apply equally to all applicants whether they are government, university or private.
 14. Section 5 of 87-2-806, MCA requires permittees to pay \$50.00 for the permit, except representatives of an accredited school, college, university, or other institution of learning or of any governmental agency that is exempt from payment of the fee. Wildlife rehabilitators are also exempt from this fee.

15. A Federal Permit from the US Fish and Wildlife Service may be required prior to issuance of a state permit. However, possession of a federal permit does not guarantee a state permit will be issued.
- i. Montana birds are protected by the Federal Migratory Bird Treaty Act of 1918 (as amended), with the exception of rock doves (domestic pigeons), house sparrows and starlings (both exotic species). Any project that entails handling or capturing of migratory bird species therefore requires a federal permit issued by the US Fish and Wildlife Service. A federal permit must be obtained before a Montana bird banding/possession permit can be issued.
 - ii. A federal permit is required for any project that entails the handling or capturing of species listed as threatened or endangered under the federal Endangered Species Act or that may impact federally listed species. A list of Montana wildlife species that are listed under the federal ESA can be found on FWP's website (<http://fwp.state.mt.us/wildthings/tande/default.html>) and at the USFWS Montana Ecological Services Field Office.

U.S. Fish and Wildlife Service Migratory Bird Permit Office
PO Box 25486, D F C 960154
Denver, Colorado 80225-0486
(303) 236-8171
<http://migratorybirds.fws.gov>

USFWS Montana Ecological Services Field Office
100 N. Park, Suite 320
Helena, MT 59601
(406) 449-5225
<http://montanafieldoffice.fws.gov/>

16. Completion of a supplemental bird banding questionnaire may be required by permit applicants requesting to band birds.
- i. A copy of the FWP Wildlife supplemental bird banding questionnaire is included as Appendix 1 of this document and can also be found on the FWP website. <http://fwp.mt.gov/doingBusiness/licenses/wildlifeCollector.html>
17. Project proposals should be submitted when available and may be requested from any permit applicant at any time.

Official sanction of external research projects

Obtaining official sanction

The FWP Wildlife Division Administrator (Administrator) can grant official sanction for an externally funded project that has potential to inform FWP Wildlife programs or initiatives. This sanction is the means by which FWP Wildlife can be considered a project cooperator, and listed as such in proposals, communications, and other media. Any external research project that will take place on FWP-owned lands requires official sanction from FWP Wildlife. Official sanction does not include financial support of a project by FWP Wildlife, contribution of data to a project by FWP Wildlife, nor obligate FWP Wildlife to contribute to the completion of the project in any way. The process for obtaining official sanction includes the following steps:

1. A written project proposal must be drafted by project staff in conjunction with a contact(s) from FWP Wildlife,
2. The written project proposal must be submitted to the Research and Technical Services Chief (RTS Chief) in electronic format by the project team or contact from FWP Wildlife,
3. The RTS Chief will solicit and collect input from FWP Wildlife staff, the seven FWP Wildlife Program Managers, and other relevant FWP staff,
4. The RTS Chief will summarize input and make a recommendation to the Administrator for sanctioning or not sanctioning the research project,
5. The Administrator will inform the RTS Chief of the final decision, and
6. The RTS Chief will communicate the decision to project staff and the FWP contact(s), and will document the decision in an official memo.

Project proposal

In order to obtain official sanction for an externally funded research project from FWP Wildlife, a project proposal must be drafted and submitted to the RTS Chief by the project team or contact from FWP Wildlife. The proposal should contain the following elements.

1. Project title
2. Project staff
 - a. External staff, including the Principle Investigator, field team, graduate students, subpermittees listed on Scientific Collectors permit application, etc.
 - b. FWP Wildlife staff, including at least one primary contact for the project from FWP Wildlife. This contact may be statewide FWP Wildlife staff, but preferably will be a regional wildlife biologist or program manager from the region(s) where work will be performed.
3. Description of project need and purpose
 - a. The length of this section is limited to 1 page maximum.
 - b. This section should reference how the project is relevant to FWP Wildlife priorities, programs, and/or initiatives. Potential examples include explaining the relevance to wildlife conservation/ management

programs, habitat conservation/ management programs, identified FWP wildlife research priorities, the Montana State Wildlife Action Plan, Species of Concern or federally listed Threatened or Endangered Species, and whether graduate student training or any university student training is involved.

4. Description of study design
 - a. The length of this section is limited to 2 pages maximum.
 - b. This section should briefly describe both field and data analysis methods.
 - c. If handling of animals is involved in the research project, this section should also reference if permits and IACUC review have been obtained. Issuance and expiration dates of currently held permits should be listed here if they have been obtained.
5. Description of project resources
 - a. This section should include itemized, annual project budgets and funding sources, project personnel roles, and itemized shortfalls in either budget or personnel resources.
6. Description of project timelines and proposed products

Timelines and decision

Proposals should be submitted to the RTS Chief in electronic format, and can be submitted throughout the year. Input on the project proposal will be solicited and collected via email or written format by the RTS Chief. Usually within 30 days of proposal submission to the RTS Chief, the Administrator will reach a final decision, and that decision and rationale will be communicated to project staff and the FWP contact(s). The final decision will either (a) provide official sanction, (b) not provide official sanction, or (c) provide official sanction contingent on factors such as, but not limited to, procurement of federal permit or increased involvement of FWP staff. FWP objectives and considerations when making this final decision will include (1) involvement of FWP staff in developing the project need and purpose, (2) whether the project furthers FWP Wildlife priorities, programs, and/or initiatives, (3) whether the study design is adequate to provide the inferences and products expected by the project personnel, and (4) whether the project has adequate resources to provide the inferences and products expected by the project personnel.

Projects that involve FWP Wildlife data, budget, personnel, supplies, or equipment resources

FWP Wildlife recognizes two levels of research projects that require internal resources to complete:

1. Projects with a total budget of less than \$10,000 that require an FWP monetary, data, supplies/ equipment, or personnel commitment to complete (Level 1 projects),
2. Projects that have a total budget of more than \$10,000, including data, operational, personnel, and/or equipment resources, and potentially require external resources in order to complete, and all wildlife-related human dimensions projects (Level 2 projects).

FWP Wildlife also recognizes seven distinct programs that exist within the Division:

1. Habitat management and conservation,
2. Big game management and conservation (including deer, elk, and antelope),
3. Special big game management and conservation (including moose, bighorn sheep, mountain goats, and bison),
4. Game bird management and conservation (including upland game birds, migratory game birds, and webless migratory game birds),
5. Nongame species management and conservation,
6. Furbearer and carnivore management and conservation, and
7. Public access and sportsman-landowner relations.

All of these programs have both biological and social (human dimensions) research needs.

In general, FWP Wildlife is not an organization that funds external wildlife research. Our professional staff will collaborate on research projects that involve use of FWP Wildlife resources. Therefore, allocation of any amount of resources to research projects will necessarily involve collaboration with FWP Wildlife staff. In an effort to develop a common understanding of the definition of collaboration with FWP Wildlife staff, the elements that will require involvement from FWP Wildlife staff on research projects are listed below. On collaborative projects, FWP Wildlife staff should have involvement in the following project elements.

1. Defining key questions, with ample time to work with FWP Regional Wildlife Program Managers and FWP Regional program staff to confirm these questions are relevant and are priorities for them,
2. Identifying hypotheses related to key questions,
3. Designing research approaches (field and analysis) and collecting data that can be used to evaluate hypotheses and questions,
3. Drafting proposals, study plans, or other documents related to the research, data, questions, or hypotheses,
4. Selection of university staff or students that will work on the project, and selection/ solicitation of other collaborators,

5. Fundraising and the allocation of funds to different tasks related to completing the research project, if appropriate,
6. Conducting statistical analyses, and interpreting results, to answer questions and evaluate hypotheses in order to draw appropriate inferences,
7. Serving on graduate student committees, or helping to oversee the work of post-Doctoral scientists, and
8. Communicating results and conclusions to all audiences, including developing written reports, manuscripts, or presentations.

FWP Wildlife staff will not undertake these tasks independently on collaborative projects, and individual FWP Wildlife staff may choose to defer some of these tasks to collaborators in order to increase efficiency, or due to lack of time or interest. FWP Wildlife staff may agree that certain elements should be pursued independently by collaborators, with their role limited to commenting on or approving products from these elements of collaboration. However, the inclination needs to be that FWP Wildlife staff will be involved in each of these tasks on collaborative research projects, unless indication otherwise is given by the FWP Wildlife staff involved.

Each of the Wildlife Division programs has issues and questions that can be addressed to varying degrees with different levels of research projects. Recognizing that each level of project requires a different level of resource commitment from FWP Wildlife and each of the distinct programs, there are escalating decision requirements for official commitment to each level of project. The processes are summarized in Figure 2, and more details are provided in the following steps, which must be completed before FWP Wildlife resources can be used for a research project.

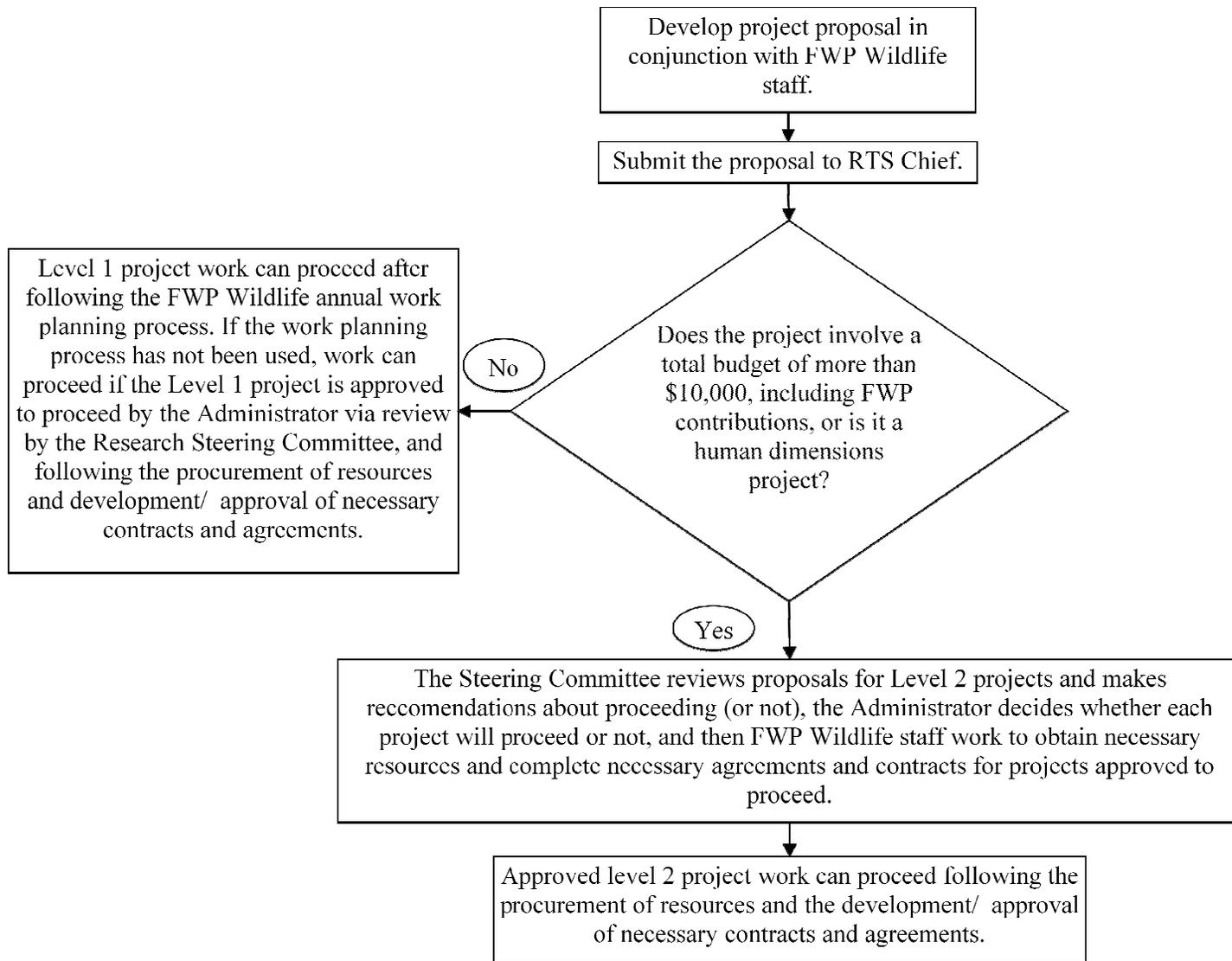


Figure 2. Process for approval and proceeding with projects that require FWP Wildlife data, budget, personnel, supplies, or equipment resources. More detail on each step is provided in the following sections.

Steps for approval and proceeding with work on wildlife research projects that involve FWP Wildlife data, budget, personnel, supplies, or equipment resources

1. Project staff must develop a written project proposal. Proposals can be drafted from anyone in FWP or from outside FWP. However, all proposals must have at least one FWP Wildlife staff member on the project staff.
2. The written project proposal must be submitted to the Research and Technical Services Bureau Chief (RTS Chief) in electronic format.
3. For Level 1 projects, the proposal development and approval process can be handled through the FWP Wildlife annual work planning process, though approval of Level 1 projects can be handled through the process for handling Level 2 project proposals, described below, if needed.
4. For Level 2 projects, the RTS Chief will distribute the proposal to the Research Steering Committee. The Steering Committee will then have correspondence and face-to-face discussion about each proposal using the objectives and considerations described below to guide their discussions.
 - a. **Research Steering Committee.** The roles of the Steering Committee are to provide input and discussion on the usefulness of research projects for FWP Wildlife programs, to vote on whether or not specific projects should be pursued or not, and to score research projects according to standard criteria representing FWP Wildlife research programmatic objectives for the purpose of prioritization of FWP Wildlife research investments. The Research Steering Committee consists of the FWP Wildlife Bureaus Coordinator, the seven Regional Wildlife Program Managers, the Wildlife Habitat Bureau Chief, the Nongame Wildlife Management Bureau Chief, the Game Management Bureau Chief, the Landowner-Sportsmen Relations Bureau Chief, and the RTS Chief. The Steering Committee may solicit input from FWP Program Coordinators, other FWP staff, and/or subject matter experts when forming their opinions, scores, and comments regarding specific proposals.
5. Members of the Steering Committee will score and rank each project according to the scoring method and criteria specified below. If necessary, Individual Program Managers can suggest that the Division Administrator (Administrator) adjust the prioritization that is suggested by the Research Steering Committee ranks based on input they receive from the Administrator, the Director's Office, or their own knowledge that indicates slight changes in the Steering Committee rankings are appropriate.
 - a. **Individual Program Managers.** The Habitat Bureau Chief is considered the manager of the habitat management and conservation program for the purposes of this process. The Game Management Bureau Chief is considered the manager of the big game, special big game, game bird, and furbearer/ carnivore management and conservation programs for the purposes of this process. The Nongame Wildlife Management Bureau Chief is considered the manager of the nongame management and conservation program for the purposes of this process. The Landowner-Sportsmen Relations Bureau Chief is considered the manager of the public

access and sportsman-landowner relations for the purposes of this process. Any individual Program Manager can consult or seek feedback relative to research proposals from FWP Program Coordinators, other FWP staff, and/or subject matter experts when forming comments or prioritizing research projects, at their discretion.

6. The Research Steering Committee will vote on whether or not each proposed research project should proceed, or not. This vote, along with the project rankings and comments collected from the Research Steering Committee during discussions about each project, will form the basis of the RTS Chief's and Individual Program Manager's recommendations to the FWP Wildlife (Administrator) as to whether each project should proceed, or not. The Administrator will make the final decision as to whether each project should proceed, or not. If the approval of a Level 1 project is being handled through review by the Research Steering Committee, once a project is approved to proceed, Level 1 projects can proceed once resources are secured and all necessary contracts and agreements are in place. Approved Level 2 projects can proceed pending securing or allocation of the necessary funding and resources from the appropriate FWP or external funding program(s). If a project is approved, Level 2 projects cannot proceed with FWP Wildlife resources without written authorization by the Administrator. Necessary data sharing agreements must be drafted according to the criteria specified below, and signed, prior to proceeding on either Level 1 or Level 2 projects.
7. For approved projects, the RTS Chief, Wildlife Operations Bureau Chief, Regional Wildlife Program Manager(s) where approved projects will take place, the Administrator, and other appropriate FWP staff will review all project proposals, work to make sure necessary resources are in place, help in the process of determining the resources that will be required and securing those resources. The Administrator will provide written approval that adequate resources are in place to begin projects before they proceed. Potential funding sources for approved projects include FWP base budgets and FTE, standard or new federal grants to FWP, funding obtained through the Montana legislative process, research partner/ collaborator contributions, and external grants. The RTS Chief also manages some FWP funds that can be used for Level 2 projects, pending appropriateness of given funding sources and funding availability.

Timelines

Research project ideas will move through the prioritization process every 6 months, in approximately December-February and June- August. The RTS Chief will ensure that all FWP staff knows the deadlines for receiving proposals in order for them to be considered in these review processes, at least a month ahead of the deadline. A time lag between the deadline for the RTS Chief to receive proposals and when they will be discussed by the Research Steering Committee is necessary to ensure that proposals can be distributed to and read by the Research Steering Committee prior to discussions about each project. Following each round of research

project review, the RTS Chief will distribute a summary of the discussions and decisions surrounding each project proposal.

In special cases, unique circumstances or budgetary opportunities may require that the review process is conducted outside of the normal 6-month review cycle, and these will be considered on a case-by-case basis.

Data sharing agreements

For any project that involves analysis of data collected by FWP Wildlife staff by a person that is not an FWP employee, a data sharing agreement must be drafted and signed by the Administrator prior to transferring data to the external party. The data sharing agreement may take different formats, but all formats must contain the following elements.

1. Project title
2. Project staff and affiliations
 - a. Including a description of third parties the data may be transferred to
 - b. Including designated official liaisons between organizations
3. Description of project need, purpose, and objectives
4. A description of the data to be used for the project
5. A description of the analyses that are planned for the data
6. A plan for disposition of the data upon completion of the analyses
7. A description of products that will be delivered to FWP and/ or other parties
8. A description of ownership of tangible and intellectual property products that will result from the analyses of the data
9. A description of how authorship on written and oral products will be determined
10. Project timelines

Project proposal format for projects that involve FWP Wildlife data, budget, personnel, supplies, or equipment resources

In order for a project to be considered and prioritized, a project proposal must be drafted and submitted to the RTS Chief. The proposal should contain the following elements.

1. Project title
2. Project staff
 - a. Including at least one primary contact for the project from FWP Wildlife
3. Description of project need, purpose, and objectives
 - a. The length of this section is limited to 2 pages maximum.
 - b. This section should reference a single FWP Wildlife program that the research project would support. The project staff makes this decision, though the RTS Chief can assist in this decision as needed. In particular, this section should reference the wildlife management/conservation decision(s) or issue(s) that the research project will

- address, and how anticipated products from the research project will affect those decision(s) or issue(s).
- c. This section should include itemized objectives for the project. If applicable, this section should also include the questions that the research project will answer.
4. Brief description of study design
 - a. The length of this section is limited to 2 pages maximum.
 - b. This section should briefly describe both field and data analysis methods.
 - c. If handling of animals is involved in the research project, this section should also reference if permits and IACUC review have been obtained. Issuance and expiration dates of currently held permits should be listed here if they have been obtained.
 5. Brief description of required project resources
 - a. This section should include project personnel and roles, required time commitments from FWP Wildlife project personnel, and the estimated total project operation budget.
 6. Description of project timelines and products

Research project approval and prioritization criteria

To review and score each project proposal, the Research Steering Committee will use criteria that represent programmatic objectives of the FWP Wildlife research program. For each research project proposal, the Administrator ultimately needs to decide whether or not the project will proceed, or not. The decision will be informed by recommendations from the RTS Chief and the Individual Program Manager and by the votes, scores, and input from the Research Steering Committee. The Administrator's decision, the staff recommendations, and the votes, scores, and input from the Research Steering Committee will be based on the following scoring criteria.

1. Focus research efforts on identified resource issues and concerns for FWP Wildlife programs, in particular on obligations identified in conservation or management plans;
2. Focus research on answering a management-related question or tangibly enhancing management programs for a species or group of species;
3. Focus research on issues that affect multiple species, a community of species, or a broad eco-type, or on identifying significant limiting factors for key species or eco-types;
4. Focus research on resource issues that involve concerns of large and/ or vocal constituency groups in Montana, the United States, or internationally that are likely to have significant impacts on FWP Wildlife programs, or on issues that involve the potential for significant economic impacts;
5. Maximize the probability that research efforts will be successful at delivering products with the resources that are available;
6. Maximize the geographic scale at which research results can be applied, including as many of the FWP Administrative regions as possible;
7. Maximize funding and collaborative partnerships to leverage resources;

8. Develop collaborative projects with individuals and organizations that have demonstrated adequate communication and cooperation with FWP staff, and productivity, when given the opportunity in a previous collaborative project (for new collaborators, we assume that the collaboration will go well);
9. Maximize contributions to existing research projects and to research in existing study areas; and
10. Focus research on topics for which investigators have expertise, and/or maximize training and learning capacity for graduate students and staff.

Appendix 1. FWP Supplemental bird banding questionnaire

APPENDIX 1: FWP SUPPLEMENTAL BIRD BANDING QUESTIONNAIRE



Montana Fish, Wildlife & Parks

SUPPLEMENTAL QUESTIONS FOR BIRD BANDING PERMIT APPLICATIONS (2009)

These questions are designed to judge the merit of invasive study methods (e.g. capture and handling) over non-invasive methods (e.g. observation only). Please answer concisely and thoroughly and with this goal in mind.

Text copied from study design or proposal documents may be appropriate.

Please do not answer questions with 'see study proposal'.

These questions are in addition to those on the permit application.

Will your banding efforts document changes in abundance, productivity and/or distribution of the proposed study species and how will it do so?

How will your banding efforts contribute reliable data on long-term population trend information?

Will your banding efforts measure detectable changes in productivity, survival or distribution of birds in response to management activities, environmental change or legal harvest seasons? If yes, how will your efforts measure changes?

Will your projected sample size be large enough for statistical analyses?

Will your findings have implications on a broader scale than just the study area, i.e. will your findings as well as any management recommendations that result from your work be applicable to the species across the state of Montana or range of the species?

If you plan to band nestlings or capture nesting adults: Is the handling of nestlings and/or nesting adults the only way to mark target individuals? Could you capture and handle target individuals during the fledgling or post nesting stage?

Will your banding efforts identify critical habitats used by migrants, or breeding and wintering areas that could not be identified through non-invasive observational study?

Do your capture and handling methods follow standardized protocols used by other studies? Please list references. Could your protocols be replicated by others in follow up studies?

Appendix 1. FWP Supplemental bird banding questionnaire

If tissue or blood is to be collected: What analyses are to be conducted with this material and has a funding source and laboratory been identified to conduct the analyses?

Please list here publications that have resulted from your banding efforts in previous studies and/or publications that could result from work to be permitted.

Please describe at least one management recommendation that could be derived directly from your banding work that could not be derived from non-invasive observational study.

Management recommendations are typically general in nature but could be site specific.

How will your findings be distributed to agencies and other researchers including the Montana Natural Heritage Program?

Appendix 2. Scoring sheet for Research Steering Committee

**APPENDIX 2: EXAMPLE PROJECT SCORING SHEET FOR RESEARCH
STEERING COMMITTEE MEMBERS**

Appendix 2. Scoring sheet for Research Steering Committee

FORM FOR REVIEW OF PROJECTS BY RESEARCH STEERING COMMITTEE

Project Name:

Reviewer Name:

	Criteria	Score (1, 5, or 10)
1	Focus research effort on identified resource issues and concerns for FWP Wildlife programs, in particular on obligations identified in conservation or management plans.	
2	Focus research on answering a management-related question or tangibly enhancing management programs for a species or group of species.	
3	Focus research on issues that affect multiple species, a community of species, or a broad eco-type or on identifying significant limiting factors for key species or eco-types.	
4	Focus research on resource issues that involve concerns of large and/ or vocal constituency groups in Montana, the United States, or internationally that are likely to have significant impacts on FWP Wildlife programs, or on issues that involve the potential for significant economic impacts.	
5	Maximize the probability that research efforts will be successful at delivering products with the resources that are available.	
6	Maximize the geographic scale at which research results can be applied, including as many of the FWP Administrative regions as possible.	
7	Maximize funding and collaborative partnerships to leverage resources.	
8	Develop collaborative projects with individuals and organizations that have demonstrated adequate communication, and cooperation with FWP staff, and productivity when given the opportunity in a previous collaborative project. For new collaborators, we assume that the collaboration will go well.	
9	Maximize contributions to existing research projects and to research in existing study areas.	
10	Focus research on topics for which investigators have expertise and maximize training and learning capacity for graduate students and staff.	
	TOTAL	