

**ADOT Environmental Planning Group
Development Program
Consultant Biological Procedures**

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I. THE EPG BIOLOGIST

The EPG biologist includes one statewide biologist who is responsible for biological compliance for the ADOT construction program. All coordination and documentation relating to biology should go through the statewide biologist; contact information is below:

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II. BIOLOGICAL COMPLIANCE OVERVIEW

- ADOT EPG oversees biological compliance for ADOT's development program through the statewide biologist. In general, any biological topics related to the development program are directed to the statewide biologist. The statewide biologist is responsible for reviewing all project deliverables (PDS, cost estimates, biological documentation review). Reference throughout this document relating to the "biologist" is assumed to be the "statewide biologist." Reference made to an on-call or contract biologist will be made as "consultant biologist." Reference made to the "consultant" may include a wider range of individuals including biologists, contract administrators, planners etc.
- At the beginning of the environmental compliance process for a construction project, the statewide biologist is contacted to discuss potential biological issues and to establish how biological compliance will proceed for the project. This information is captured through the [Project Data Sheet](#) (PDS). Information recorded on this sheet includes information on potential species and habitat present, survey requirements, agency coordination needs, and an initial determination of potential affects including consultation requirements. In addition, information is established for the type of documentation, deliverable dates, documentation duration, and estimated hours of completion by the consultant. The statewide biologist will sign all PDS's.

Since environmental compliance is a dynamic process, the biological scope of work may change as the project develops. If this results in a change to the cost estimate a new PDS will be submitted to the biologist and NEPA planner for review and signature. Coordination is required with the contract administrator or planner when shifting funds from one discipline to another within a task order.

- During the PDS stage the type of biological document required for the project will be determined. There are two main types of biological documents: the Biological Review (BR) and the Biological Evaluation (BE). A BE is written when there is a possibility of a threatened or endangered species impact from the project. A BR is written when there are no anticipated impacts to threatened and endangered species and the scope of work is limited – see part III Reports for more information.

- Once the PDS phase is completed the cost estimate is submitted to the biologist through the project EPG NEPA planner for review. The following information is required in the cover letter of the cost estimate:
 - Anticipated first draft submittal date of the biology document
 - Anticipated submittal date to land managing agency if applicable
 - Anticipated submittal date to the US Fish and Wildlife Service (USFWS) if applicable
 - Anticipated date of completion

The biologist will then review the cost estimate, along with the schedule and submit comments back to the consultant. The biologist will sign off on the cost estimate once it is approved.
- For in-house projects, the NEPA planner coordinates with the biologist to determine if biology can be completed in-house or if a consultant needs to be assigned. If it needs to go to a consultant the NEPA Planner will make the consultant request. ALSO, during the PDS phase or cost estimate phase, if the ADOT biologist decides to do the biology in-house, the ADOT biologist will inform the NEPA Planner and the work will be removed from the consultant contract.
- When the draft biological document is due, per the agreed date in the cost estimate, the consultant will submit the document to both the ADOT biologist and the NEPA planner. The NEPA Planner will send any comments that they have to the ADOT biologist within 8 working days of receipt, or will send notice to the ADOT biologist that they have no comments. The biologist will review the biology document along with the EPG NEPA planner comments and will send the compiled comments to the consultant biologist, along with a review memo. The review memo will also go to the EPG Planner. Every phase of the biology review will have an associated memo.
- If the document includes mitigation, the biologist, in conjunction with the EPG Planner, will submit the mitigation to the project manager and the appropriate district representatives (including but not limited to the district engineer (DE), district transportation engineering specialist (TES), district environmental coordinator (DEC) and assigned resident engineer). A response needs to be included in the file from the DE, TES or DEC for verification that the measures are acceptable. This step will be completed before the biology document is approved, and before it is transmitted to any outside agencies.
- Once a project has been approved by ADOT the document will be submitted to the land-managing agency/tribe for review if the project is located on easement with underlying ownership. The transmittal letter will be drafted by the consultant and sent electronically to the biologist. The biologist will transfer the letter to ADOT letterhead and submit the document to the land-managing agency for review. See section V. Agency Coordination for more details.
- If there is a determination that the project may affect a listed species, the document will be submitted to the USFWS:

- The consultant will draft a letter to the USFWS requesting either concurrence or a formal Section 7 consultation, which ever is applicable (concurrence for a may affect, not likely to adversely affect and consultation for a may affect, likely to adversely affect).
 - The consultant will send the letter electronically to the biologist
 - The biologist will then send the EPG approved document, the land-managing agency review letter (if applicable), and the cover letter to the lead federal agency for submittal to the USFWS. The cover letter will also be sent electronically to the lead agency.
 - The hard copy package going to the lead federal agency would also include a transmittal sheet with basic project information and a request to submit the package to the USFWS. See section V. Agency Coordination for more details.
- It is important to note that the determination of affect to protected species is ultimately made by the lead federal agency. The determinations written in the report are considered recommendations by ADOT. The ADOT biologists review these determinations and if the consultant and ADOT do not agree on a potential affect the ADOT biologist will bring the issue to the lead federal agency for the final determination.
 - The biological compliance process for ADOT is complete once coordination with the USFWS and/or federal land-managing agency is complete. If there is no easement and no coordination necessary with the USFWS, the process is complete once the biologist issues the final approval memo.
 - During the biological compliance process, the biologist will record status and proceedings in the EPG database. Information to be recorded includes: date PDS signed, date cost estimate approved, total documentation and mitigation costs, date draft document is received, date comments are returned to the consultant, project coordination notes, notes on mitigation, notes on document comments, date the document was sent to an outside agency, date the report was returned, and any sensitive species or invasive species issues. Document submittal dates are to be recorded by the consultant via the [PTS System](#).
 - During project construction the biologist is also available to address any biological issues, review and submit monitoring reports and coordinate, complete, or oversee species surveys.

III. REPORTS

- With few exceptions, every project needs a [Biological Evaluation](#) (BE), a [Biological Review](#) (BR), or an in-house Biological Memo written. A BR is completed for minor projects with minimal or no habitat loss and no potential to impact listed species. The BE is completed when there is a potential to impact listed species and/or species habitat, or when a detailed analysis is needed to document there will be no impact to

listed species and/or species habitat. In general, a BE is completed for projects occurring on tribal or federal lands, but depending upon circumstances a BR may be acceptable. Coordination is needed with the biologist and the land-managing agency before a BR is prepared in this instance. In some cases the BE format can be used without including a detailed species analysis and will provide a higher level of documentation than the BR because an exclusion table is included. Consultants should coordinate with the biologist on the level of detail required in the BE prior to starting work. An in-house memo is written at the discretion of the biologist for projects with a limited scope of work, urban projects, or projects that occur within the limits of a recently cleared project.

- A [Small Project Biological Evaluation Form](#) may be used in certain circumstances for projects on the Tonto National Forest. This form is used for geotechnical clearances and small projects not requiring a Biological Evaluation, as determined by the ADOT Biologist and the Tonto National Forest.
- The [Geotechnical Investigation Biological Clearance Form](#) is a biological compliance checklist for ADOT geotechnical activities. The consultant biologist submits the completed form to the ADOT biologist for review followed by incorporation into the overall geotechnical compliance document.
- When preparing reports, make sure to use an updated protected species list, which can be found at the [Arizona Ecological Services](#) website. Use the scoping response letter and/or on-line tool print-out from the Arizona Game and Fish Department (AGFD) for state sensitive species analysis, and use the protected native plant list from the [Arizona Department of Agriculture](#) website for analyzing potential native plant impacts.
- Analysis of state sensitive species impacts and native plant impacts will be documented within the appendix of the biological report. Please see the appendices in the [Biological Evaluation](#) and [Biological Review](#) guidance for further details.
- If a site review is necessary for a BR it should be noted on the PDS and discussed with the biologist. Photographs are not required for biological documents, but should be included if they will provide a more clear understanding of the determinations made.

IV. ADOT COORDINATION

General

- When biology documents require replanting as a form of mitigation - the consultant will notify the biologist as early as possible. The biologist will inform the NEPA Planner, the Project Manager, Roadside Development, and the District to ensure the planting and associated watering plan is under way. This coordination and associated

plan must either be complete or near completion before the biology document is finalized.

- Any EA's and EIS's will be sent to the EPG statewide biologist to review the biology sections of the report; including any CE's or ED's with a "may affect" determination or with non-standard biological mitigation.

Scheduling

- The EPG statewide biologist requires that **all biology documents be final at least 3 months prior to the actual bid date**. Consultants need to discuss any special circumstances with the biologist immediately if a situation arises that may prevent the biology document from being finalized on time.
- When creating the biology schedule, it must agree with any schedules that have been created at a kickoff meeting prior to the cost estimate completion. If no project schedule has been set yet, the consultant NEPA planner must be informed of the biology schedule to ensure the overall project schedule is not in conflict with the biology schedule. If there is a conflict the biologist must be notified immediately. For general scheduling purposes, the following guidelines are applicable: 30 days for EPG biologist review, 30 days for land manager review, 45 days for USFWS concurrence, 215 days for USFWS formal Section 7 consultation. These times do not run concurrently.

Biology Document submittals for ADOT projects:

- Documents are sent directly to the EPG biologist with a copy to the EPG NEPA planner from the consultant. **The consultant is to include the following information in the cover letter of every biology document submittal: brief history of any previous coordination, ADOT NEPA planner, consultant NEPA planner, consultant biologist, EPG bid ready date, Project Manager, landowners, 404 permit requirements, vegetation removal, preliminary affect determination.**
- The EPG biologist will review the document and return with comments to the consultant biologist and the EPG NEPA Planner when the review is complete. The EPG NEPA planner is expected to review the first draft biology document to verify scope of work, project limits etc. EPG NEPA planner comments will be forwarded to the biologist so comments can be combined into one transmittal to the consultant. The biologist will attach the standard biology memo to the document copies.
- When the consultant re-submits the document, it will be sent directly to the biologist with a copy of the cover letter only to the EPG NEPA Planner.

- If the biologist has further comments, he/she will return them to the consultant with the standard biology memo attached. The memo will be copied to the EPG NEPA planner.
- Prior to final approval of any biology document, and prior to document submittals to landowning agencies and/or the US Fish and Wildlife Service, the biologist, copying the EPG NEPA Planner, will submit any proposed mitigation to the Project Manager and the ADOT District for approval. Coordination needs to be done with both the Project Manager and District prior to this point as well. This must be considered when creating the biology schedule.
- If mitigation includes post-design measures (monitoring, generating reports, etc) the biologist needs to coordinate with the NEPA Planner to ensure the Planner, District, and PM develop a strategy for payment. Some possibilities include post-design services through the design consultant, and adding it to the contractor responsibilities.
- The consultant will submit the final document to the biologist. The biologist will complete the cover memo indicating that the process is complete and send the memo to the EPG NEPA Planner and the consultant biologist. The biologist will also send a final copy of the document to the NEPA Planner. The mitigation found in the final biological document should be used verbatim in the environmental clearance memo and environmental document.
- ADOT planners and biologists can view the standard biology [Review Memo](#) on the ADOT Intranet (*please note*: you must be logged on to the ADOT network to access the ADOT Intranet)..

Biology Document submittals for Local Government Projects:

- The ADOT Local Government NEPA Planner will coordinate with the biologist to determine the level of biological documentation needed.
- All local government documents are submitted to the ADOT Local Government NEPA Planner who will then forward them to the biologist for review. After review, the biologist will send comments back to the ADOT Local Government NEPA Planner and he/she will forward them back to the appropriate local government. The biologist will use the same cover memos for local government projects as used for ADOT projects.

V. AGENCY COORDINATION

Consultants must coordinate with the EPG biologist before contacting any outside agency or tribe. The EPG biologist will determine the appropriate contact (ADOT or consultant). Many agencies have provided data or recommendations to ADOT

and do not want to be called repeatedly for the same request. Also, some agencies and tribes have requested an agency contact for project related coordination.

General

Scoping for biology should be completed by following the [Scoping Guidance](#).

- Consultants should use the [Arizona Game and Fish On-line Environmental Review Tool](#) for projects requiring game and fish scoping. This will provide information on special status species occurrences. For larger projects the on-line tool may not delineate a project area accurately. In this case, request the species list in the scoping letter to AGFD. See [Scoping Guidance](#) for more details.
- When the consultant receives the on-line printout send it to the EPG NEPA planner for review of the project area and description. In most all cases the line or point tool should be used to delineate ADOT projects. The system automatically includes a three-mile buffer to include species occurrences. Please discuss with the biologist if you feel it is necessary to delineate a project area by drawing a polygon. Also, if the review tool brings up concerns that need to be addressed prior to submitting the project biological document, please forward the on-line printout and discuss with the biologist. Otherwise, the printout should be included as an attachment to the biological document. Please do not sign the printout.
- ADOT highways through tribal and federal lands are almost exclusively on easements, not right-of-way. The term right-of-way indicates that ADOT owns the land while an easement means that ADOT does not own the land but has permission to operate within it. Based upon this, when on tribal easements do not coordinate with the AGFD and do not follow the Arizona Native Plant law. Since these are state agencies and regulations they do not apply on tribal land. When on a federal land-managing agency easement the Native Plant law also does not necessarily apply. Federal agencies should be contacted on whether or not to follow the Native Plant Law and whether or not to coordinate with the AGFD for sensitive species related issues. In general, ADOT will coordinate with AGFD when on federal lands for Heritage database records and particularly for wildlife connectivity related concerns.
- Any Arizona Game and Fish responses to scoping letters which include project specific questions or proposed mitigation will be sent to the EPG biologist if they are biological in nature, or to the NEPA planner if they are not biological in nature. The biologist and/or NEPA planner will determine the appropriate response to the letter. Concerns identified within the AGFD scoping letter are to be addressed in the Appendix of the biological report. The on-line tool printout and the letter received from the AGFD during scoping are also attached to the biological report.

When on any Federal or Tribal lands the level of biological documentation required and the list of applicable sensitive species to address will be obtained during the scoping phase –see [Scoping Guidance](#).

- All reports on Federal or Tribal lands will be sent to the appropriate land-manager contact for review. The consultant will send the document, along with a cover letter, to the biologist. The biologist will forward the document, with the cover letter printed on ADOT letterhead, to the land managing agency for their “review”. The word “concurrence” will not be used in the letter since technically only the US Fish and Wildlife Service can “concur” with a determination.
- Information in the cover letter should include (as necessary):
 - A brief description of the project
 - The ADOT project number, federal project number, and name in the appropriate location depending on whether state or federal letterhead
 - The species addressed within the report
 - The determinations of effect
 - A statement that ADOT is designated as a non-federal representative in the process as appropriate for section 7 consultations
 - A statement asking the land owning agency to sign on the signature line of the cover letter if the document is satisfactory
 - A statement asking the land owning agency to return a signed copy of the cover letter.

See sample letters below:

[Sample Letters to Agencies](#) (*on Section 7 Consultation*)

- One copy of the biological document will be sent to the land-managing agency with the cover letter. One copy of the report will be kept at the EPG office. Therefore, the consultant will send two hard copies of the report signed by the consultant biologist and a copy of the cover letter sent electronically.
- The signed cover letter will be attached to the environmental clearance document.

Affect Determinations and Associated Coordination:

- **The consultant will not contact the USFWS prior to contacting the EPG biologist.**
- *No effect.* No effect documents, including BR’s are attached to final NEPA document copy that goes to FHWA.
- *May affect, not likely to adversely affect.* The consultant will draft a cover letter, from the federal lead agency (usually FHWA, Robert Hollis) to the USFWS (Steve Spangle) asking for concurrence (see [Sample Letters to Agencies](#)). This letter will be sent electronically to the EPG biologist to forward to the federal lead agency, along with the biological report. Three copies (one copy for ADOT and two copies for FHWA) of the final report need to be submitted to ADOT.

- *May affect, likely to adversely affect.* The consultant will write a cover letter, from the federal lead agency (usually FHWA, Robert Hollis) to the USFWS (Steve Spangle) asking for section 7 consultation (see [Sample Letters to Agencies](#)). This letter will be sent to the biologist to forward to the federal lead agency, along with the biological report. Three copies (one copy for ADOT and two copies for FHWA) of the final report need to be submitted to ADOT.

It is important to include a statement in the request for concurrence from FHWA to FWS that ADOT will be designated as the non-federal representative for the project. In some cases other federal agencies may allow this as well. The biologist is responsible for coordinating with the lead federal agency to determine the appropriate procedures.

- FHWA must be coordinated with to set up a formal Section 7 consultation when FHWA is the lead Federal agency. FHWA must also be invited to all informal and formal consultation meetings when FHWA is lead Federal agency. In general, ADOT will do the coordination.
- If there is not Federal funding for the project, coordinate with the biologist to determine the federal nexus, if any.
- When there is a may affect on any Federal lands and FHWA is also involved, then it must be determined at that time who the lead agency will be. In most cases FHWA will be the lead. The Federal landowner or the tribe will be invited to any informal or formal section 7 consultation meetings.
- Any time there is a formal or informal Section 7 consultation, the EPG statewide biologist will coordinate with the Federal lead agency to determine whether or not they will attend meetings. In addition, the NEPA Planner, ADOT District, and Project Manager will be asked to attend as necessary.
- If there is question about a potential affect, or potential mitigation the biologist will contact USFWS and ask for a conference, after approval of the Federal Lead Agency.
- When a Biological Opinion (BO) is issued by the USFWS for a project, a copy of the BO must go to the biologist for review, as well as to the District and PM, before the project is cleared. The reasonable and prudent measures from the BO will be included in the environmental document and project mitigation measures.

Navajo Nation Projects:

- A BE should be completed for most all projects on Navajo Nation Lands. In some cases detailed individual species evaluations may not be necessary. However, the BE format which includes an exclusion table should still be used. In some cases for minor projects a BR or a letter describing the project and brief species analysis may

be appropriate. Please check with the biologist to determine the necessary level of documentation for your project.

As with other ADOT projects, species mitigation should be discussed with the biologist prior to receiving a draft biological document. Final documents should be sent to the biologist along with a transmittal letter addressed to the Navajo Nation. Transmittal letters should include a brief project description and summary of species determinations. The biologist will forward the biological document to the Navajo Nation biologist for review and request issuance of a biological resource compliance statement.

VI. INVASIVE SPECIES

- The ADOT Natural Resources Management Section (NRMS) surveys and manages plants found on the [Arizona Department of Agriculture](#) prohibited, regulated, and restricted weed list. When on Forest Service lands, ADOT also may survey and manage species found on the [USDA Forest Service Invasive Species](#) list.
- During project development consultants should forward a copy of the project scoping letters and maps via e-mail to the appropriate [ADOT Natural Resources Management Group](#) contact and copy the EPG statewide biologist. Allow the NRMS 30 days to respond with any invasive species issues. If NRMS responds with invasive species issues and/or non-standard mitigation coordinate with the EPG statewide biologist on how to proceed.
- In some cases adjacent land management agencies may request a specific project area to be surveyed for invasive species. In this case contact the biologist for information on who will complete the survey. The biologist will review any invasive species reports completed and will coordinate with the EPG NEPA planner for any non-standard mitigation.
- Non-standard mitigation needs to be reviewed and approved by the District and the Project Manager. The EPG statewide biologist will inform the NEPA Planner of additional measures and the NEPA Planner will coordinate with the PM and District to get written agreement that the mitigation will be followed. Once this is done, the EPG statewide biologist will forward the report to the consultant and NEPA Planner with a transmittal that the report is complete and the District and PM have agreed with the mitigations.

VII. MIGRATORY BIRD TREATY ACT was developed in 1918 to stop the indiscriminate killing and market hunting of migratory birds. This act applies to activities conducted within the U.S. by any person, business, organization, institution, and any local, state, or federal agency.

- When completing general project site visits or biological field surveys consultant biologists should review the project area for the presence of any obvious nest structures of protected species that may be impacted directly by project activities.

Mitigation measures are typically developed for species such as cliff swallows, burrowing owls and raptors. Each project does not require species-specific surveys. However, densely populated bird habitats such as the case with wetlands and/or riparian areas should be noted and mitigation considered when vegetation removal is necessary. Photographs should be taken of any suspected situation. Contact the biologist to coordinate conservation measures for development projects.

- Some possible measures to prevent disturbance of active nests include:
 - Avoid disturbing nesting habitat (vegetation or structures) during the nesting season. Vegetation containing nesting birds can be cut or cleared prior to construction during non-nesting seasons.
 - Prevent migratory birds from nesting on structures that will be repaired or demolished prior to nest building. For example, exclusionary devices such as netting, tarps, exclusionary gel, slick surface coatings (slick paint) or ledge protectors (coils, pin and wire) can be placed on structures to prevent nest building.
 - Physically remove nests that do not contain eggs or young to prevent active nests.
 - Dispersal methods such as visual, auditory, or sensory deterrents (active construction, predator models, scare balloons, tapes, sonic devices, chemical repellants) may be used to deter birds from nesting but will not exclude them from nesting areas.
 - Avoid directly or indirectly damaging vegetation outside of the work area.
- In the event occupied nests are encountered during construction, consult with the biologist. Active nest removal requires permits from the USFWS. This may be required if project activities will directly impact active nests. In some cases, active nests may be screened from construction to prevent impacts. Work may continue if the active nests will not be destroyed and if parent birds will not be precluded from tending their nests to the extent that the eggs or young are negatively impacted.

VIII. HABITAT CONNECTIVITY see [EPGs Wildlife Connectivity Web Page](#)

Special needs of wildlife, including habitat connectivity, should be considered on all major roadway reconstruction projects. When a roadway project includes reconstruction such as widening or realignment, or if bridges and/or culverts are being replaced or modified, wildlife crossing opportunities should be considered during project development. Please note that the [Arizona's Wildlife Linkage Map](#) should also be reviewed to determine if the project has any identified wildlife linkages within the project limits and the Arizona Game and Fish Department or adjacent tribe should be contacted for input.

IX. MAINTENANCE REQUESTS

The EPG biologist should be contacted for any maintenance requests requiring a biological report. The Office of Environmental Services will provide guidance for these requests.

X. QUALIFICATIONS

Qualification requirements can be viewed at the [Consultant Qualifications](#) link. On-call consultants, or project consultants working on biological resource components of ADOT projects in development, maintenance, or construction should meet these requirements. EPG on-call consultants are required to provide a resume to the EPG Technical Section manager prior to working on ADOT projects.