

Biological Assessment Seminar Study Guide

Seminar Materials

When you arrive at the seminar we will provide you with a hard copy of the PowerPoint for the seminar. We will NOT be providing you with a hard copy of the BA manual. We recommend that you download a copy of the manual which is available on the WSDOT biology website at <http://www.wsdot.wa.gov/Environment/Biology/BA/BAguidance.htm>.

We recommend that you wait to print until you see that it has been updated for the seminar so that you have the most recent version. The updated manual will be dated February 2015.

Seminar Preparation and Exam Information

Because we will not be able to cover all information contained in the manual or on the test during the seminar, we strongly encourage biologists to be familiar with the topics and material listed below **before** the seminar. There are a number of topics that are new or have been updated. Some of these, such as calculating the extent of project-generated noise, are complicated and reviewing them prior to the class will help you follow the discussions.

The basic exam is a closed-book/closed-note and consists of multiple-choice or true-false questions. To pass the exam biologists must score 80 percent or higher. The exam is comprehensive in its scope and will cover topics that are addressed in the seminar in addition to information that is included in the manual only. **It is recommended that you review the BA Manual prior to the course to be successful on the exam.** Feedback from previous seminar participants is that this exam is challenging. Preparing in advance for the exam is recommended. Exam results will be mailed to students 2-4 weeks following the exam.

Please review these materials before attending the seminar:

The Advanced Training Manual: *Biological Assessment Preparation for Transportation Projects* (<http://www.wsdot.wa.gov/Environment/Biology/BA/BAguidance.htm>).

- Biological Assessment (BA) writing process (Ch. 2).
- The Endangered Species Act (ESA) consultation process and the WSDOT consultation process (Ch. 2).
- Familiarity with ESA sections relevant to Section 7 consultation (Ch. 5).
- Impact avoidance and minimization measures in BAs and Biological Opinions (BMPs, minimization measures, performance standards, conservation measures, conservation recommendations, etc.) (Ch. 6).
- Project-related noise analysis, terminology, and thresholds for injury and disturbance (Ch. 7).
- Defining the action area (Ch. 8).
- Environmental baseline (Ch. 9).
- Indirect effect analysis and terminology (Ch. 10).
- Critical habitat and primary constituent elements (Ch. 12).
- Making ESA effect determinations and appropriate effect determination language (Ch. 12 and 13).

- Magnuson Stevens Act consultation (what do you consult on and what are the appropriate effect determinations) (Ch. 16).
- Stormwater impact assessment (Ch. 17).

Stormwater, Noise Assessment, and Indirect Effects Guidance are also provided on our website: (<http://www.wsdot.wa.gov/Environment/Biology/BA/BAguidance.htm>).

Hi- Run Users guide at http://www.wsdot.wa.gov/NR/rdonlyres/85B43C71-DEBE-478C-A468-C6BF64D86B64/0/BA_HighwayRunoffUsersGuide.pdf

Federally listed species in the state of Washington http://www.wsdot.wa.gov/Environment/Biology/bio_usfw.htm and http://www.wsdot.wa.gov/Environment/Biology/bio_noaa.htm. We don't expect you to know the run timing of every ESU or all the scientific names, but be familiar with endangered, threatened, and candidate species identification (common names), habitat types, and listing terminology.

What to bring to the seminar:

For the seminar: A hard copy of the most recent version of the BA Manual (February 2015)

For the basic exam: A calculator and pencil.

For qualification as a senior or junior author (WSDOT on-call consultants only): You will need to provide proof of education and experience. Senior authors need to document at least 2 years of experience writing BAs. See the WSDOT biology website: <http://www.wsdot.wa.gov/Environment/Biology/BA/qualification.htm> for details on how to document proof of education and experience. Bring these documents to the training or send to:

Attn: Jeff Dreier
Washington State Department of Transportation
Environmental and Engineering Programs
310 Maple Park Avenue SE
P.O. Box 47331
Olympia, WA 98504-7331

or, dreierj@wsdot.wa.gov

Materials must be provided prior to or within one week of your training date. Material received more than one week after the training date may result in a delay posting your name (provided you qualify) on the list of qualified consultants.

More information and the specific qualification requirements for WSDOT on-call consultants to write biological assessments for WSDOT are posted on the WSDOT biology website: <http://www.wsdot.wa.gov/Environment/Biology/BA/qualification.htm>.

We look forward to seeing you in the upcoming seminar.