

**Wind Regulatory Advisory Panel (RAP) Work Session -- Wildlife  
December 14, 2009**

**Location:** DEQ Central Office, 2<sup>nd</sup> Floor Conference Room  
629 E. Main Street, Richmond, VA 23219

**Start:** 9:45 a.m.  
**End:** 4:45 p.m.

**RAP Leader/Facilitator:** Carol Wampler, DEQ  
**Recorder:** Carol Wampler

**RAP Members Present:**

Mary Elfner, National Audubon  
Ron Jenkins, DOF  
Larry Nichols, VDACS (alternate)  
Tom Smith, DCR  
Bob Bisha, Dominion  
Judy Dunscomb, TNC, by phone (with group's agreement)  
Ray Fernald, DGIF  
Don Giecek, Invenergy (alternate)

**Public Attendees:**

Bill Bolin, Dominion  
Hank Seltser, BP Wind  
Rick Reynolds, DGIF (alternate)

**Introductory Comments** – Carol Wampler

Carol thanked staff members of the sister agencies for meeting with her and for developing refinements to the PBR working draft. The drafts that will be considered at today's work session – as well as subsequent work sessions – will be the culmination of recommendations from the three subcommittees, the plenary group's review of the subcommittees' recommendations, and the sister agencies' suggested refinements.

The work sessions are not formal RAP Meetings. A quorum is unlikely to be present, and no decisions will be made. Attendees at the work sessions will be discussing draft provisions in detail, but will only make preliminary recommendations. The plenary RAP will be asked to make formal recommendations to the DEQ Director at the final RAP Meetings scheduled for January 5 & 7.

**Regulatory Provisions vs. Guidance** – Carol Wampler, facilitator

As discussed at the last plenary RAP Meeting, one of the objectives of the work sessions is to delineate which draft PBR provisions should be included in the regulation itself, and which provisions are better suited to appear in DEQ guidance. The group discussed some criteria that could undergird these delineations, as follows:

- Provisions that DEQ can and should fully enforce should appear in the regulation.

- If DEQ cannot or should not fully enforce a provision, then the provision should be placed in guidance.
- Details are usually appropriate for guidance, with the main points should appear in the regulation. Details often include specific methodology, references where needed data may be located, etc.
- Provisions that are subject to change – such as technological advances – are usually appropriate for guidance.
- Recommended procedures may be appropriate for guidance, while basic requirements are found in the regulation.
- Guidance can spell out for DEQ staff and the applicant what should be done to accomplish and satisfy the regulatory requirement.
- Guidance is not independently enforceable by the agency; however, the agency generally evaluates the applicant’s adherence to the guidance in determining whether the applicant has satisfied regulatory requirements, which are enforceable.
- The agency has sole authority to draft guidance, and development of guidance does not require a public participation process. In development of the wind PBR, however, it is very helpful to DEQ to have input from the RAP’s panel of experts for both the reg and the guidance. DEQ will consider and take into account the RAP’s recommendations for the regulation, just as it does in other regulatory actions. DEQ plans also to consider and take into account the RAP’s recommendations concerning guidance provisions. Especially on topics where there remains a difference of opinion regarding the appropriate guidance provisions at the end of the RAP’s deliberations, the agency anticipates discussing these guidance issues further with interested RAP members when guidance is being drafted.

## **Discussion of Issues**

### **1. Definition of “Wildlife”** – Carol Wampler, facilitator

At the last RAP plenary meeting, some RAP members questioned the Living Resources Subcommittee’s recommendation that natural heritage resources and ecological cores be included in the definition of “wildlife.” They referenced DGIF’s definition of “wildlife” in Va. Code Ann. Section 29.1-100, which says, “wild animals, wild birds and freshwater fish in the public waters of the Commonwealth.” This topic was referred to the work session for further discussion.

Carol reported that, in phone discussions with her, Roger Chaffe of the OAG favored consistency with existing VA statutory definitions of “wildlife,” all of which exclude reference to habitat. Roger also stated that the PBR definition should encompass all wildlife, and not just the wildlife that falls under DGIF’s jurisdiction; i.e., our definition should also include creatures within VMRC’s jurisdiction, since the PBR covers all wind projects – land based and offshore. Since all the creatures mentioned in DGIF’s and VMRC’s definitions are animals, there is no legal need to spell out all the different types of animals in a regulatory definition of “wildlife.” It is generally better not to “define a

term with a term.” Roger has no objections to a general definition for the PBR, like “non-domesticated animals,” or similar.

Roger also pointed out to Carol that wildlife habitat is not the same as wildlife itself, and therefore DEQ cannot require mitigation for habitat impacts as it can require for wildlife impacts. He added, however, that the applicant could propose habitat-related measures as part of his wildlife mitigation plan. If accepted by DEQ, then those measures would become enforceable provisions of the wildlife mitigation plan.

Attendees at the work session discussed Roger’s advice and various statutory definitions of “wildlife” (see DGIF’s compilation of “Definitions of Wildlife,” attached).

Comments:

- It seems clear that Natural Heritage Resources (and similar habitat references) should come out of the PBR definition of wildlife.
- Natural Heritage Resources should be defined separately.
- Even though all the creatures mentioned in DGIF’s statutory definition are animals, it may be helpful to spell them out (animals, fish, birds, etc). The public is used to this approach.
- If we change to a general definition like “wild animals” or “non-domesticated animals,” we may unintentionally give the impression that we are diverging from DGIF’s & VMRC’s definitions, rather than merely re-stating their definitions in general terms.
- “Domesticated” and “non-domesticated” are not defined (as far as we know) and may not convey clear meaning if used in our definition.
- We should stick with concepts in statutory definitions of wildlife; we do not intend to protect all of the things mentioned in DGIF’s regs.
- We should add the word “native” to our definition, since we do not intend to mitigate for exotics, etc.
- If we stipulate in the def that we mean only “native” wildlife, then we could be excluding small-mouthed bass and similar.
- “Native” also raises the question of “native” vs. “naturalized.” E.g., elk now being reintroduced.
- A general definition is preferable for a regulation, rather than a specific list – opinion voiced by a number of attendees. Favored “simple and streamlined.” Guidance can explain what we mean – e.g., specific types of creatures from DGIF’s and VMRC’s definitions, exclusion of exotics and appropriate non-native.

**Conclusion:** The majority of attendees favored recommending a short, general definition, like “wild animals.” Two attendees expressed preference for writing out a list of the creatures mentioned in DGIF’s law (10.1-100) and VMRC’s law (28.2-100), although one of these two said her preference was “slight.”

**2. DCR’s Recommendations for “Natural Heritage” Provisions** – led by Tom Smith (Reference **version of working draft incorporating DCR’s suggestions** – attached; hereinafter “DCR Draft”)

l. 38 “Ecological Core” – delete “patch of”; otherwise, no objection from attendees to this suggested provision

l. 54 “Natural Heritage Resource” – no objection

l. 88 “Wildlife” – remove refs to habitat; define “wildlife” consistent with discussion (summarized above)

l. 90 “Wildlife Species” – delete; no need to define; no objection from attendees to this change

## II. 296-303 Analysis of Project Impacts on Natural Heritage Resources

### Discussion:

- Since habitat issues are not an appropriate part of the definition of “wildlife,” the Natural Heritage provisions should be deleted from Section 3.A, Wildlife, and moved to Section 3.C, Other Natural Resources – just as Tom and DCR have now recommended.
- Note: there is not statutory authority to require mitigation plan for these “other” resources; statute mandates mitigation only for wildlife and historic resources when DEQ determines significant adverse impact.
- Tom’s comment: Mapping of Ecological Community Groups (l. 298) is mostly a field-survey exercise.
- “Desktop” survey should extend “within 2 miles of Project Boundary.” Add to l. 297. Tom noted that 2 miles is what DCR looks for under current practice.
- “Field” survey should only be required “within the Project Boundary,” as currently stated in draft on line 297.
- DCR is utilizing the definition of “Project Boundary” recommended by the Living Resources Subcommittee (found at ll. 80-83 of this draft), meaning that they recommend a field survey for the area “directly impacted by construction and operation of the proposed facility.” If the RAP ultimately recommends a broader definition of Project Boundary (such as def recommended by General Subcommittee in ll. 75-78 of the draft), then the term “Project Boundary” at l. 297 will have to be replaced with language consistent with the Liv Res def of Project Boundary.
- l. 300 Insert “Plant” so that the phrase reads, “State Threatened and Endangered Plant Species.” T&E animals are addressed under Wildlife section.

**Conclusion:** All attendees accepted these recommended changes. No objections noted.

Further note: DGIF prepared and distributed a working draft of the PBR incorporating their recommendations (also attached; hereinafter “DGIF Draft”). Tom and the group noted that the habitat-related portions of DGIF’s Section 3.A.1.b-d (DGIF Draft ll. 227-237) are consistent with DCR’s recommendations, as presented above.

### **DCR’s Recommended Guidance Provisions:**

ll. 305-314 of DCR Draft. No objections noted.

ll. 316-320 of DCR Draft. No authority to require mitigation for Natural Heritage Resources, as noted above. DEQ staff – ensure that suggested guidance provisions do not suggest otherwise.

Lunch break: noon – 1:05 p.m.

**3. Standard for Determining That “Significant Adverse Impacts to Wildlife Are Likely” (i.e., trigger for wildlife mitigation plan) – FOR BATS** (this and subsequent discussions facilitated by Carol)  
(Reference ll. 362-63 of DCR Draft)

Comments:

- Question: Are hibernacula “habitat” or “wildlife”?  
DGIF answer: A cave is habitat; bats using a hibernaculum are wildlife; a hibernaculum (in use) is indicia of wildlife.
- If the applicant goes to DGIF website, he will see locations where there is actual presence of bats.
- Definition of “hibernaculum”? – unknown; so we can’t say unequivocally that the term “hibernaculum” necessarily means that bats are actually present.
- DGIF believes that hibernaculum within 12 miles should = finding of likely significant adverse impact on bats.
- Section 4 of Living Resources Subcommittee draft provides that hibernaculum within 3 miles (5 km) = likely sig adv impact on bats.
- DGIF: use of 12 miles relates to VA big-ear bats; known travel distance of endangered bats from hibernaculum
- Industry: we all want to know re hibernacula; however, they question whether presence of hibernaculum should trigger mitigation without observation of bats on the project site.

Conclusions:

**Re Section 3:** Agreed by all attendees that 12 miles from disturbance zone is reasonable minimum desktop survey area for known hibernacula (mapping only). DGIF wants this reqmt to be added to Section 3.A (Wildlife). Industry wants it to be added to 3.C (Other Resources – implicitly “habitat”). Wherever DEQ places this provision, it should be stated that existence of known hibernacula within 12-mi zone does not independently trigger need for mitigation plan.

**Re Section 4.A.3 (trigger for determining that likely sig adv impact to bats):** Agreed by all attendees = “Bats are observed, or known hibernacula exist, within the project boundary.” (Note: The group was using Liv Res definition of “project boundary.” If def of “project boundary” changes, then we will need to adjust the language suggested here.)

**4. How to address issue of “where relevant” (10.1-1197.6.B.7 of statute) in PBR?**

Discussion:

Paragraph B.7 of our statute says that conditions for issuance of the PBR include, “Where relevant, an analysis of the beneficial and adverse impacts of the proposed project on

natural resources.” In the operational provisions of our working draft, we have been considering methods of determining whether wildlife, historic resources, and other natural resources exist within the project boundary, or within various prescribed distances from the project boundary – mapping, field surveys, etc. Each determination yields info indicating if these resources are “relevant” – that is, the resources are relevant if they are found to be present pursuant to provisions in Section 3 of our draft PBR; they are not relevant if they are not found to be present pursuant to Section 3. For the resources that are present and are therefore relevant, the applicant will go on to describe the “beneficial and adverse impacts of the proposed project” on these resources. It is implicitly a 2-step process: determining whether natural resources exist and, if so, then describing anticipated impacts. (No further action required if resources are not found to be present within prescribed area.) All attendees agreed that this is what we have proposed in our working drafts, and that this is the appropriate way to address the “where relevant” language of the statute.

Carol noted that the General Subcommittee did not propose a definition of “relevance,” probably because of the operational approach being considered in the substantive subcommittees – Living Resources and Landscape – and because crafting a general definition is very difficult. It is helpful that the RAP is taking an operational approach (cf. Section 3) to explaining the meaning of “relevance” for our PBR.

Note: We are discussing today how we should address the “where relevant” language for wildlife; however, we expect a similar/consistent approach for historic resources to be presented by DHR and discussed at tomorrow’s work-session.

## **5. Threatened & Endangered Species**

In her meetings with VDACS & DGIF, Carol learned about their respective authorities over T&E – VDACS for T&E plants and insects, and DGIF for T&E animals (excluding Insecta, since covered by VDACS). Brief summary of her mtgs and of work session’s discussion of T&E issues –

Both VDACS & DGIF have statutes re T&E, including statutory authority to bring criminal charges for taking of T&E.

VDACS can issue incidental take permits, including for “progressive development,” which may well include development of wind projects. VDACS does not have authority over an owner’s actions on his own property. Since wind-energy developers generally own or lease (long-term) the project area, the developer may well be legally deemed an owner under VDACS’ statutes, and therefore exempt from potential prosecution for takes of T&E plants and insects. Under current practice, developers of any kind of project consider whether T&E plants or insects are present when making siting decisions, and confer with VDACS about potential concerns; we expect this practice would also be followed by wind developers. T&E issues re VDACS’ authority will probably not be a legal concern for VA wind developers under state law. (See also email from Larry Nichols on VDACS issues – attached)

DGIF does not have statutory authority to issue incidental take permits; so, if an incidental take occurs at a VA wind facility, criminal prosecution is possible. DGIF's prosecutorial branch considers intent and other issues that might militate in favor of a wind developer who is adhering to our PBR mitigation plan. Our GA could make compliance with our PBR a safe harbor for developer under state law, if GA should choose to do so. There is no way, however, for GA to shield developer from prosecution under fed law.

(Note: recent ruling from fed district ct in MD, enjoining development of wind-energy project in Greenbrier County, WV, until developer secures fed incidental take permit. Industry reps – in this discussion and in other individual comments to Carol – indicate that obtaining a fed incidental take permit is generally a long, complex, and expensive process; having to obtain fed permit could be major problem in financial viability of a project. We do not yet know if or when the MD ruling might be appealed. Although not directly applicable to VA projects, we should watch carefully this case and its potential ramifications for VA projects.)

OAG Input: When the RAP considered concerns regarding erosion & sediment control at wind-project sites, Roger Chaffe had advised that DEQ lacks statutory authority to address the issue. There are state statutes setting out a regulatory permitting and enforcement regime under the auspices of DCR (and, to some extent, local govts); it would be inappropriate for DEQ to attempt to address E&S under the PBR. Carol asked Roger to what extent the statutory provisions, including enforcement, for T&E affect DEQ's ability to address T&E in the PBR. Roger told her by phone that it would be advisable to avoid prescribing specific mitigation for T&E in the PBR – somewhat similar concerns as for E&S, with other agencies having specific authority over the issue; potential conflict/confusion and “double jeopardy” type argument if developer subject to both DEQ's PBR enforcement and DGIF/USFW's criminal enforcement; GA has directed DEQ to deal with T&E in a number of other statutes, so GA “knows how to address the issue,” but chose not to do so in the PBR statute. DEQ can and should address T&E in Section 3 Analysis; however, would be prudent not to enumerate specific T&E mitigation/enforcement.

Practical Reality – DGIF and other attendees agreed that there is no difference between how DEQ would ask developer to mitigate for T&E bats/birds and how DEQ will require permittee to mitigate for non-T&E bats & birds. So there appears to be no practical disadvantage to omitting specific reference to T&E beyond Section 3 provisions, and we would be avoiding potential legal controversy by taking this approach. Developers noted, in this discussion and others, that existence of T&E are part of “fatal flaw” analysis – one of key factors in whether developer will try to site a project in a particular area.

Further Comments from DGIF: DGIF also has authority to bring criminal charges for taking of raptors or, for that matter, of any form of wildlife (presumably without a hunting license). They said that this authority shouldn't interfere with DEQ's ability to mitigate/enforce for non-T&E wildlife, so why should it interfere with T&E? DGIF also added that they would not prosecute for take of anything other than T&E.

Remaining Question: Is a take permit an “environmental permit” pursuant to 10.1-1197.6.B.12?

## **6. Fixed-Point Bird Use Surveys (Section 3.A.2)**

(Reference ll. 160-192 of DCR Draft and corresponding sections of DGIF Draft)

Industry favors the methodology reported out by the Living Resources Subcommittee (which is contained in the DCR Draft). They say this approach is an “industry standard,” as confirmed by their consultant at West.

DGIF and Audubon maintain that the Liv Res draft is not the industry standard – that other variations are used, depending on the site.

DGIF prefers its approach, which involves multiple fixed-point surveys, comprising what they call an area survey. (See DGIF draft)

DGIF had explained to Carol that both their approach and the approach in the Liv Res draft (DCR Draft) could be called fixed-point surveys for purposes of this reg. It might therefore be possible to frame the regulatory language using the term “fixed-point bird use surveys,” and place the methodology in guidance. Since DEQ has considerably more time to draft the guidance than it does the reg, we could continue to discuss the recommended methodologies at a later date.

Carol asked Dominion and DGIF to talk prior to next Monday’s work session in order to draft recommendations for reg vs. guidance for the wildlife portions of Sections 3-5. Having their recommendations could greatly streamline our work-session discussion next Monday. Both parties graciously agreed to take on this assignment. They will also communicate with other interested RAP reps to the extent possible.

## **7. \$5000 Cap (Section 5.B.4)**

(Reference ll. 397-404 of DCR Draft)

Carol re-capped from earlier meetings the pro’s and con’s of stating a financial cap (\$5000) in the reg for post-construction mitigation and monitoring, as is recommended by Liv Res Subcommittee.

Advantages: (1) reasonable method of achieving statute’s intent to facilitate renewable energy by limiting developer’s financial liability; (2) useful framework for appropriately apportioning developer’s efforts between mitigation and monitoring.

Disadvantages: (1) publishing “\$5000” in a reg would create a potential lightning-rod for public criticism – could create false impression that industry is trying somehow to buy the right to harm wildlife; (2) even though Liv Res Subcommittee developed rationale re how much curtailment and post-construction monitoring could be done for \$5000/turbine/year, it would be difficult for DEQ to explain this to the public; (3) OAG thinks it might be difficult to defend in court, especially since DEQ does not have

mechanism the way SCC does to establish a “record” for each case/project; (4) independent developers on the RAP have expressed to Carol the concern that, once a figure is published in a reg, the tendency is for the “cap” to become the “minimum” that is expected, if not by DEQ, then by the public (this is akin to the comments made by industry at previous RAP mtgs re “10 bat” proposal, and the majority of RAP members “voted” against that proposal); and (5) some developers told Carol that an across-the-board \$5000/turbine/year reqmt for the life of the project may not always be financially feasible for independent developers, especially for smaller projects – some developers can’t spend the \$5000 as a minimum and still go forward with the project.

All attendees agreed with the concept of the cap proposed by Liv Res Subcommittee.

State-agency reps individually expressed their support of cap. One agency rep also clarified, however, that the original proposal to Liv Res Subcomm by utility had been that they were willing to spend \$5000/turbine/year throughout the life of the project (\$5000 was already their minimum *and* maximum), even if the full amount were not necessary for required mitigation and monitoring (they would use excess to fund further research, etc.). The utility confirmed that this was indeed their original proposal. Carol applauded the company for its willingness to make this financial commitment, but again mentioned the comments from other developers, and pointed out that the language in the Liv Res recommendation says, “up to” the cap/turbine/year. The group did not express insistence on implementing the utility’s original idea.

Carol asked the group to consider whether there are other means of expressing the concept of the \$5000 cap without putting the actual number in the regulation. In case the director or others are concerned about the potential disadvantages (above) of stating \$5000, she would like to have alternative language available. Perhaps it can be stated in the reg that the combined cost of mitigation and post-construction monitoring will not exceed some number of hours of curtailment at a particular cut-in speed, etc.<sup>1</sup> Attendees will think about this possibility.

Other comments:

See DGIF Draft p. 21, l. 915 ff.

Liv Res Subcommittee (based on Arnett studies) is OK with cut-in speed of 5 m/sec.

---

<sup>1</sup> DGIF had provided to Carol an order issued by the Vermont public service commission in the Sheffield case. This order reflected that the developer had agreed to curtail “up to” a certain number of days during specified seasons, up to a certain number of hours/day, when temperatures and wind velocity were at certain levels (a form of “cap”). Unlike the requirements of our statute, however, the VT developer did not agree to (and the commission did not require) any post-construction monitoring. The group briefly discussed the VT order. It appears that the numbers used in the VT order were developed for the particular case in hand, so they may not be applicable for our PBR. The precedent of providing a cap on the developer’s curtailment requirements, however, may be useful.

