

Conservation Measures and Survey Requirements



VFO BLM



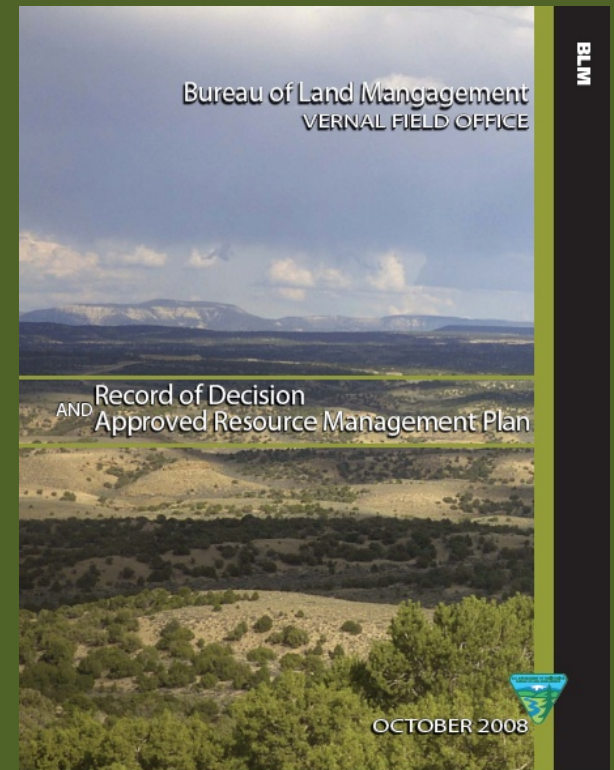
**Where do the Conservation
Measures come from?**

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What do they say?

Conservation measures Outlined in the Vernal Field Office Resource Management Plan (RMP)

- RMP finalized in 2008
- When oil and gas resources developed, conservation measures are followed for 5 listed plant species



Pariette cactus (*Sclerocactus brevispinus*)

Uinta Basin hookless cactus (*Sclerocactus wetlandicus*)

clay reed-mustard (*Hesperidanthus argillacea*)

shrubby reed-mustard (*Hesperidanthus suffrutescens*)

Ute ladies'-tresses (*Spiranthes diluvialis*)

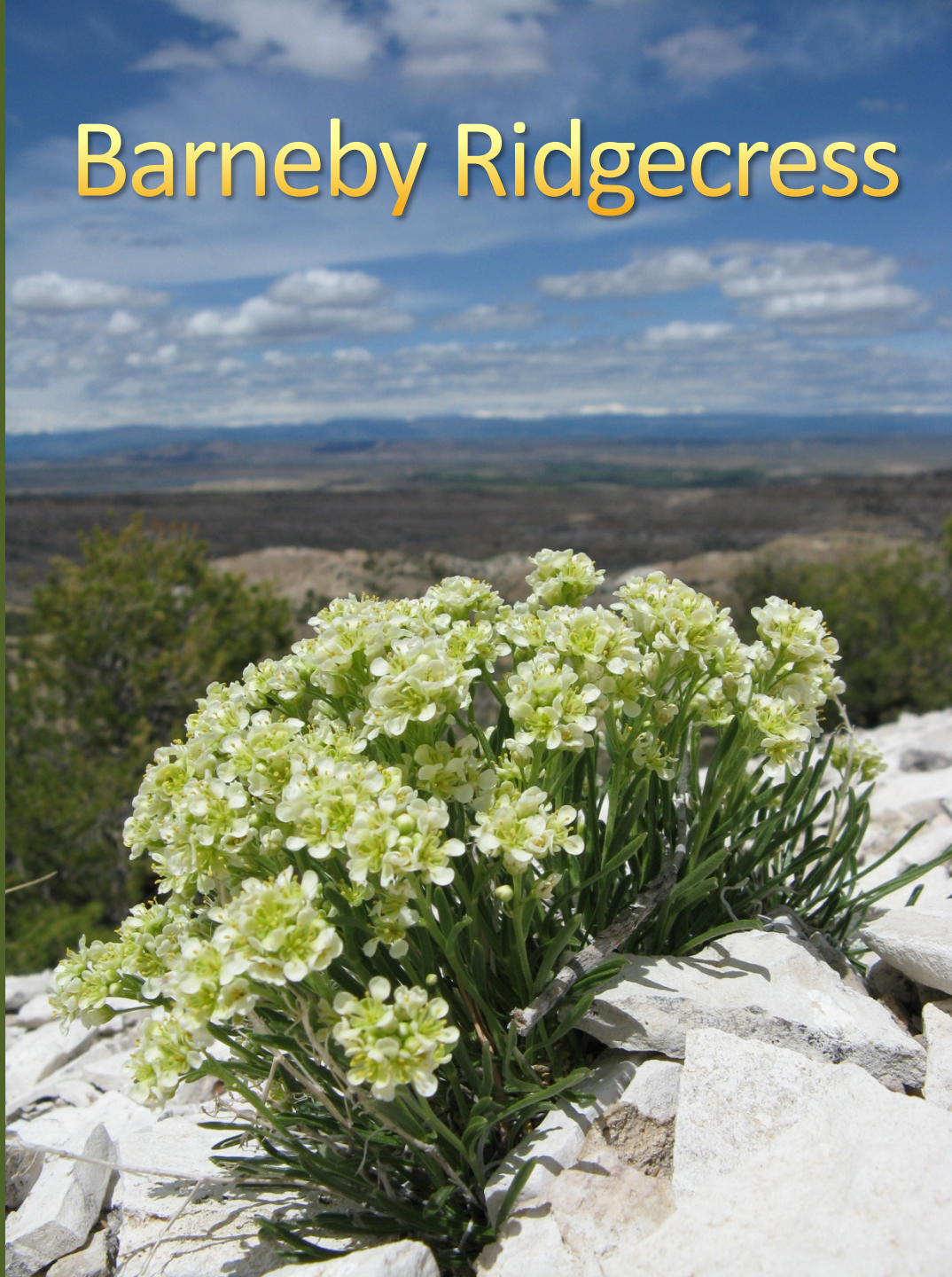


... White River penstemon and Graham penstemon too!



(Penstemon Conservation Agreement, 2014)

Barneby Ridgecress



- **ACEPM** –Applicant-committed environmental protection measures. **Chapter 2 – Proposed Action of NEPA document** (usually EA)
- **Mitigation Measures** – The language agencies (BLM) uses in **Chapter 4 (Environmental Effects) of NEPA documents** such as addition of **condition of approvals (COAs)**, **best management practices (BMPs)** from interagency agreements, or negotiated measures with industry.
- **Conservation Measures** –USFWS uses during consultation with agencies, can be the same as submitted **ACEPMs, COAs** and **Mitigation**, or can be **additional measures** the USFWS mandates for conservation. Found in **concurrence letters** and **Biological Opinions (BO)**. Included in FONSI (Finding of No Significant Impacts) Statements for BLM NEPA documents.

Purpose of Conservation Measures

- **Avoid or minimize impacts** from oil and gas exploration and development
- **Ensure compliance** with the Endangered Species Act (ESA)
- **Prevent listing** of special status species (Graham's penstemon, White River penstemon)

Conservation Measures

- 5 conservation measures for each of the 5 species
- Graham and White River beardtongue outlined in conservation agreement



Some Special Status Plants Require Special Protection

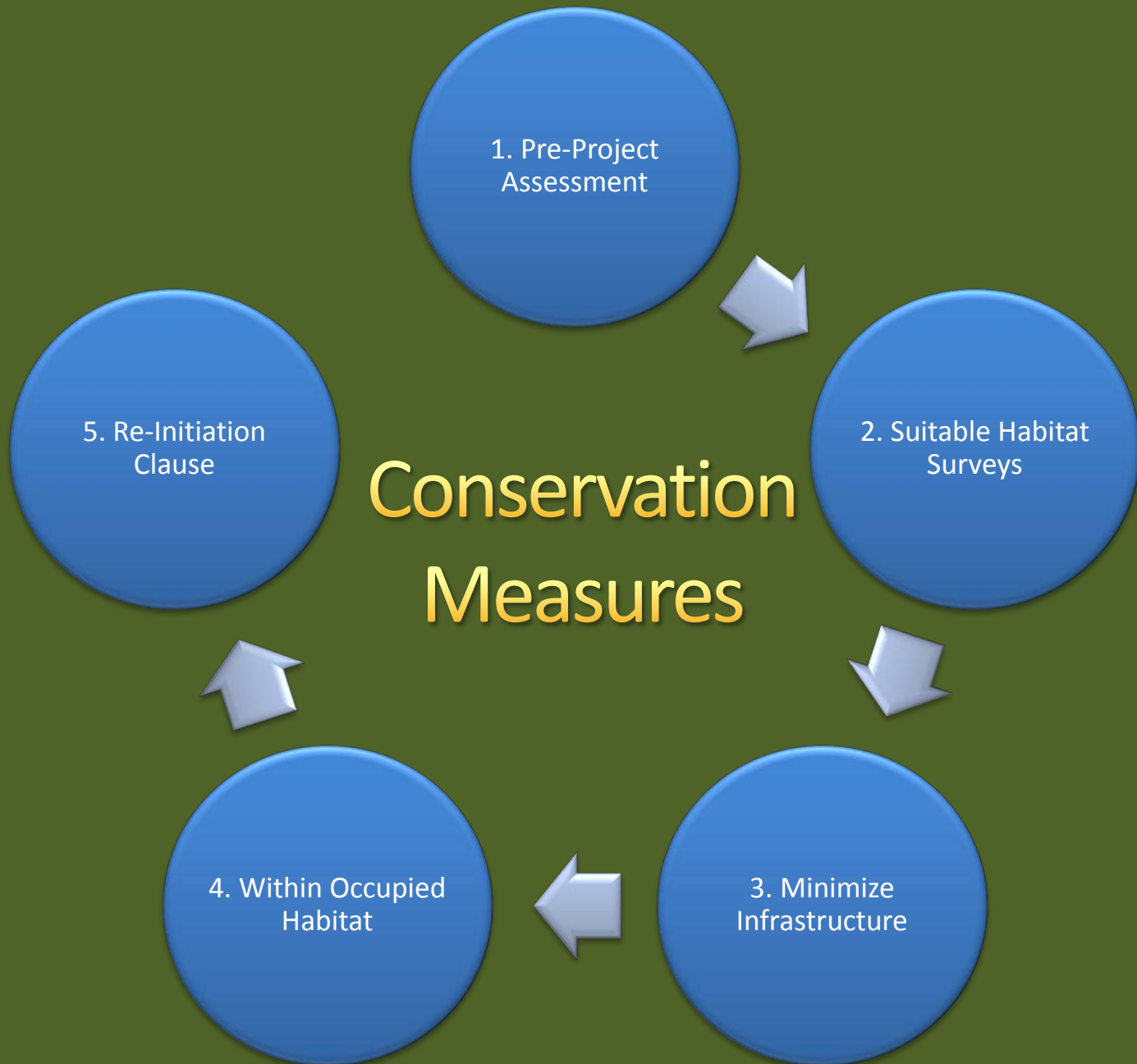


Read and understand species-specific conservation measures outlined in the RMP

Habitat definitions:

1. Potential
2. Suitable
 - Includes marginal and ideal habitat
3. Occupied

The BLM and the Service Developed
the following measures to **minimize
effects to federally listed species** and
ensure that activities carried out
during oil and gas development are in
**compliance with the Endangered
Species Act (ESA)**



#1: Pre-project assessment



Pre-project habitat assessments will be completed across 100% of the project disturbance area within potential habitat to determine if suitable habitat is present.

#2: Suitable habitat surveys

Site inventories conducted within suitable habitat to determine occupancy:

- a. By qualified individuals,
- b. in all suitable habitat, usually during flowering,
- c. within 300 feet of disturbance
- d. include plant species lists and habitat
- e. **generally valid 1 year**





Survey dates

Species	Usual Start	Usual End	Survey valid until
clay reed-mustard	May 1	June 5	May 1 the following year
shrubby reed-mustard	April 15	August 1	April 15 the following year
Pariette cactus	March 15	June 30	4 years, with spot check surveys after first year
Uinta Basin hookless cactus	Any time of year, provided there is no snow cover		
Ute ladies'-tresses	August 1	August 31	August 1 the following year
Graham's penstemon	April 15	May 20	Start of next flowering season
White River penstemon			

#3: Minimize infrastructure



Design project infrastructure to minimize impacts within suitable habitat:

- a. reduce well pad size
- b. limit new access route
- c. common ROWs utilities and roads
- d. reduce width of ROWs
- e. signs to limit off-road travel
- f. stay on designated routes
- g. revegetated with native species

#4: Within occupied habitat



Within occupied habitat, project infrastructure will be designed to minimize impacts to populations and individual plants:

- a. Follow #3
- b. 300 foot buffers
- c. Surface pipelines stabilized
- d. Avoidance areas marked
- e. Directional drilling
- f. Avoid erosion/water flow
- g. Produced water away from occupied habitat
- h. Minimize disturbed area with interim reclamation

#5: Reinitiation clause

If you anticipate that plants or occupied habitat will be lost during project activities, **IMMEDIATELY** reinitiate section 7 consultation with the Service

Concluding Paragraph

- i. Before and during construction, areas for avoidance should be visually identifiable in the field (e.g., flagging, temporary fencing, rebar, etc.).
 - j. Where technically and economically feasible, use directional drilling or multiple wells from the same pad.
 - k. Place produced oil, water, or condensate tanks in centralized locations, away from occupied habitat, and
 - l. Minimize the disturbed area of producing well locations through interim and final reclamation. Reclaim well pads following drilling to the smallest area possible.
5. Occupied clay reed-mustard habitats within 300' of the edge of the surface pipelines' right of ways, 300' of the edge of the roads' right of ways, and 300' from the edge of the well pad shall be monitored for a period of three years after ground disturbing activities. Monitoring will include annual plant surveys to determine plant and habitat impacts relative to project facilities. Annual reports shall be provided to the BLM and the USFWS. To ensure desired results are being achieved, minimization measures will be evaluated and may be changed after a thorough review of the monitoring results and annual reports during annual meetings between the BLM and the Service.
6. Reinitiation of section 7 consultation with the USFWS will be sought immediately if any loss of plants or occupied habitat for the shrubby reed-mustard is anticipated as a result of project activities.

Additional site-specific measures may also be employed to avoid or minimize effects to the species. These additional measures will be developed and implemented in consultation with the USFWS to ensure continued compliance with the ESA.

L 1.9 LEASE NOTICE: SHRUBBY REED-MUSTARD (*SCHOENOCRAMBE (=GLAUCOCARPUM) SUFFRUTESCENS*)

The Lessee/Operator is given notice that the lands in this parcel contain suitable habitat for shrubby reed-mustard under the Endangered Species Act (ESA). The following avoidance and minimization measures have been developed to facilitate review and analysis of any submitted permits under the authority of this lease:

In order to minimize effects to the federally endangered shrubby reed-mustard, the BLM in coordination with the USFWS developed the following avoidance and minimization measures. Integration of and adherence to these measures will help ensure the activities carried out during oil and gas development (including but not limited to drilling, production, and maintenance) are in compliance with the ESA. The following avoidance and minimization measures should be included in the Plan of Development:

1. Pre-project habitat assessments will be completed across 100% of the project disturbance area within potential habitat¹⁹ prior to any ground disturbing activities to determine if suitable shrubby reed-mustard habitat is present.

¹⁹ *Potential habitat* is defined as areas which satisfy the broad criteria of the species habitat description, usually determined by preliminary, in-house assessment.

Additional site-specific conservation measures may be used to avoid or minimize effects. These will be determined during consultation.

websites

Species information:

<http://www.fws.gov/endangered/>

RMP:

http://www.blm.gov/ut/st/en/fo/vernal/planning/rmp/rod_approved_rmp.2.html