

From: [Stahl, Megan D.](#)
To: [Jennifer Stanhope](#); [Lennon, Tiernan](#)
Cc: [Taina Pankiewicz](#)
Subject: RE: MVP Information
Date: Friday, October 27, 2017 11:17:29 AM
Attachments: [image001.png](#)

Jen/Tiernan,
I understand that there will be no further comments on the plant AMM. Would you like both the Virginia spiraea and SWP measures outlined below included in one formal letter report to you (cc: FERC)? Please confirm and I will finalize the letter for submission.
Thanks,
Megan

From: Stahl, Megan D.
Sent: Tuesday, October 17, 2017 4:00 PM
To: 'Jennifer Stanhope' <jennifer_stanhope@fws.gov>; 'Lennon, Tiernan' <tiernan_lennon@fws.gov>
Cc: 'Taina Pankiewicz' <TPankiewicz@envsl.com>
Subject: RE: MVP Information

Jen,

As we discussed this morning, in addition to the avoidance and minimization measures that MVP proposed for the unsurveyed parcels in the email below, MVP also proposes to restrict herbicide use within 100' of Small Whorled Pagonia if found on parcel WV-GR-065.

In addition, regarding the 10-year monitoring plan that would be established if Small Whorled Pagonia is found on parcel WV-GR-065, MVP would develop the plan in coordination with USFWS EFO and WV DNR. The final plan would then be submitted to USFWS EFO and WV DNR for review and approval and would include the following details:

- 10 year monitoring assessments would be conducted annually during optimal survey timeframe to assess colony status and potential threats to continued success;
- Each monitoring assessment would include documentation of plant height, leaf whorl diameter, flowering, and fruiting;
- Data collected will be provided annually to USFWS EFO and WV DNR;
- Baseline assessments would be conducted prior to and during construction;
- Monitoring assessments pre-construction, during construction and post-construction would include measurements of light levels, soil moisture and temperature; and
- The surveyor would be approved by USFWS EFO and WV DNR if not on approved surveyor list, including 3rd party academic research organization.

Please let me know if you need anything else.
Megan

From: Stahl, Megan D.
Sent: Tuesday, October 17, 2017 8:02 AM
To: 'Jennifer Stanhope' <jennifer_stanhope@fws.gov>; 'Lennon, Tiernan' <tiernan_lennon@fws.gov>
Cc: 'Taina Pankiewicz' <TPankiewicz@envsl.com>
Subject: RE: MVP Information

Jen and Tiernan,

Here are responses to your recent questions. Please review and let me know if you would like to discuss.

1. Here are the acreages for the unsurveyed parcels for plants:

Parcel	County	State	Tract Total Acre	300' study corridor (acre)	LOD (acre)
WV-GR-065	Greenbrier	WV	86.9	8.1	3.5
WV-SU-046	Summers	WV	4.3	3.5	2.3

2. As stated in the FEIS each VSAT site would include a 4-foot-diameter dish antenna attached to a 2.5-inch metal pole. I included an example photo below. No light is emitted from the equipment. The VSAT modems transmit and receive in frequency ranges outside of the ranges heard by bats.



3. The final Exotic and Invasive Species Control Plan is attached.

This plan is consistent with MVP's commitment that no herbicides will be used, except when requested by land management agencies or at the request of landowner. It specifically states: *Eradication measures could include hand cutting unless requested to use herbicides by a state or federal management agency to achieve effective removal of these species.*

In addition, MVP developed Karst-specific Erosion and Sediment Control Plans (as detailed on page 4-59 of the FEIS), which explains:

Mountain Valley does not propose the wide-scale use of pesticides and/or herbicides in karst areas, but would consider them for localized use, only after a request from a landowner or land management agency. However, in the case of any request, Mountain Valley would not apply fertilizers, herbicides, and pesticides within 100 feet of a waterbody or karst feature.

4. Exotic and invasive species monitoring:

The attached plan states: *MVP will monitor the right-of-way annually after the first and second growing seasons following construction to allow for early detection of exotic or invasive species infestations or outbreaks.*

5. For the parcel that remains to be surveyed for Small Whorled Pagonia you asked about permanent waterbars. Please review the following explanation and let me know if you would like to discuss.

The centerline of the proposed pipeline crosses this parcel at the highest point so the unsurveyed area would be downslope. Please review the attached E&S plan sheets. The unsurveyed parcel is outlined in red. The green bars represent the permanent waterbars that would remain post-construction. Each is approximately 50' in length. The hollow blue triangle represents the upslope area that would be diverted during a storm event. Once the water hits the end of the waterbar, the water would disperse evenly down the slope and not form channels. The hollow blue triangles contribute very little hydrology to the overall watershed and downslope areas. The only areas that could potentially have any change in hydrology would be the area directly below the waterbars and these areas are within the permanent ROW that would be mowed post-construction.

6. Avoidance and minimization measures that MVP proposes for the unsurveyed parcels are as follows:

Parcel	Species	County	State	300' study corridor (acre)	LOD (acre)	Proposed Avoidance and Minimization Measures
WV-GR-065	Small Whorled Pagonia	Greenbrier	WV	8.076802	3.51	<ul style="list-style-type: none">• If possible, survey May 1 – September 30<ul style="list-style-type: none">• If found:<ul style="list-style-type: none">• Relocate• If found and relocation is not possible establish a management plan that could include:<ul style="list-style-type: none">• Establish as much of a buffer as possible and fence off to avoid (show fencing and buffer on E&S plans)• Minimize clearing in the immediate area• Avoid erosion/sedimentation and changes in hydrology by installing additional E&S controls (temporary diversion berm on the working side of the area)• Restrict chipped brush from being blown off of the right-of-way into habitat (as stated in FEIS)• Wash equipment to avoid introduction of non-native species• Replant non-permanent areas with woody species (which is already stated as a commitment in MVP's Restoration and Rehabilitation Plan)• Establish a 10 year monitoring plan
						<ul style="list-style-type: none">• If possible, survey July 1 – September 30<ul style="list-style-type: none">• If found:<ul style="list-style-type: none">• Relocate• If found and relocation is not possible establish a management plan that could include:

WV-SU-046	Virginia Spirea	Summers	WV	3.499243	2.30	<ul style="list-style-type: none">• Establish as much of a buffer as possible and fence off to avoid (show fencing and buffer on E&S plans)• Minimize clearing in the immediate area• Avoid erosion/sedimentation and changes in hydrology by installing additional E&S controls (temporary diversion berm on the working side of the area)• Restrict chipped brush from being blown off of the right-of-way into habitat (as stated in FEIS)• Wash equipment to avoid introduction of non-native species• Replant non-permanent areas with woody species (which is already stated as a commitment in MVP's Restoration and Rehabilitation Plan)• Restrict herbicides within 100' of plants (in accordance with FERC's Procedures MVP will not apply herbicides within 100 feet of a waterbody)• Establish a 2 year monitoring plan
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Sumalee asked for information about acreages of tree clearing associated with take by season within buffers. We are working on that information and will provide it midweek.

Please let me know if you need anything else.
Megan

From: Stahl, Megan D.
Sent: Monday, October 09, 2017 5:58 PM
To: 'Jennifer Stanhope' <jennifer_stanhope@fws.gov>
Cc: 'Taina Pankiewicz' <TPankiewicz@envoy.com>
Subject: MVP Information

Jen,

I am trying to compile the information that you requested last week and I have a few questions. The E&S plans and SWPP are still in development and have not been approved yet. The POD was recently submitted. These documents are very large and I cannot send them by email. Is there particular information you are looking for that I can send to you, or do you need the entire files?

Can you clarify which satellites you were referring to that could cause concerns for light and noise?

I attached the maps of the unsurveyed areas for plants, which includes:

Parcel_Num	County	State	Survey Needed Acre	Surveys Needed
WV-GR-065	Greenbrier	WV	8.076802	small whorled pogonia
WV-SU-046	Summers	WV	3.499243	Virginia spiraea

Can you please clarify which parcel you need information regarding topography?

Thanks,
Megan

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