

Memo to WTWG Re: Submission of Historical Implementation Data to NEIEN

Presented to WTWG on 05072015

Background

[Attachment 6](#) of the 2015 CBPO Grant Guidance states that grant recipients are expected to submit draft historical BMP data by June 30, 2015 and final historical BMP data by September 30, 2015. This data will be used to inform the initial calibration of the Partnership's Phase 6 Watershed Model. This memo describes necessary changes to the NEIEN submission process which will accommodate the reporting of historical BMP data.

Model Version in Header Schema

Because land use types and some BMP mappings will change in the Phase 6 modeling tools, NEIEN will need to differentiate between XML files submitted for Phase 5 purposes (such as 2015 Progress), and those submitted for Phase 6 purposes (such as historical BMPs). To facilitate this differentiation, jurisdictions should begin reporting "Model Version" in the NEIEN "Header Schema." All XMLs reported with a model version value of "5" will be used for 2015 Progress. All XMLs reported with a model version value of "6" will be used for historical cleanup purposes. All existing data within NEIEN that was submitted for 2014 Progress or past years will be carried over automatically for 2015 Progress without requiring changes by jurisdictions. Of course, jurisdictions who wish to replace existing data for 2015 Progress may do so by reviewing the list of active XML submissions and requesting older XMLs be made inactive. Please contact CBPO for the latest list of active XMLs. An example of the header schema with model version value can be found below.

<Header>

```
<AuthorName>DC BMP</AuthorName>
<OrganizationName>District Department of the Environment</OrganizationName>
<DocumentTitle>GetBMPFullRefresh</DocumentTitle>
<CreationDateTime>2014-04-28</CreationDateTime>
<DataServiceName>GetBMPFullRefresh</DataServiceName>
<SenderContact>martin.hurd@dc.gov</SenderContact>
<Property>
  <PropertyName>Schema</PropertyName>
  <PropertyValue>GetBMPFullRefresh</PropertyValue>
  <PropertyName>ModelVersion</PropertyName>
  <PropertyValue>6</PropertyValue>
</Property>
```

</Header>

Agency Code in BMP Identity

A number of large land holding federal agencies will have specific land uses in the Phase 6 Model allowing the Partnership to better track implementation and pollution reduction actions from federal partners. A list of federal agency codes (and any non-federal agency codes requested by jurisdictions)

will be added to the NEIEN Codes List to accommodate this tracking. All BMPs that are not implemented on federal facilities should be designated using the non-federal agency code, “NONFED.” A list of these agency codes and an example of their use is included below. Note that the codes listed below may change based upon decisions made by the Federal Facilities Action Team and the WTWG. The Federal Facilities Action Team may request that a different suite of federal agencies be modeled directly in Phase 6, while the WTWG may request to add any number of agencies to the list. For example, Delaware may wish to add DNREC as an agency code that maps to “NONFED” in Scenario Builder. This will not be required for Phase 5.

List of Agency Codes (As of May 7, 2015)

Agency Land Holder	NEIEN Agency Code	SB/Model Code
US Department of Agriculture	USDA	USDA
ARS	ARS	ARS
US Forest Service	FS	FS
Department of Interior	DOI	DOI
National Park Service	NPS	NPS
US Fish and Wildlife Service	FWS	FWS
Department of Defense	DOD	DOD
US Department of the Army	USA	DOD
US Marine Corps	USMC	DOD
US Department of the Navy	USN	DOD
US Army Corps of Engineers	USACE	DOD
US Department of Air Force	USAF	DOD
Army National Guard	USARNG	DOD
Smithsonian Institution	SI	SI
General Services Administration	GSA	GSA
National Aeronautics and Space Administration	NASA	NASA
US Department of Veterans Affairs	USVA	FEDOTHER
Department of Homeland Security	DHS	FEDOTHER
US Coast Guard	USCG	FEDOTHER
Federal Law Enforcement Training Center	FLETC	FEDOTHER
National Institute of Health	NIH	FEDOTHER
Armed Forces Retirement Home	AFRH	FEDOTHER
Central Intelligence Agency	CIA	FEDOTHER
Architect Of The Capitol	AOC	FEDOTHER
National Oceanic and Atmospheric Administration	NOAA	FEDOTHER
Federal Highway Administration	FHWA	FEDOTHER
Federal Railroad Administration	FRA	FEDOTHER
US Postal Service	USPS	FEDOTHER
Federal Aviation Administration	FAA	FEDOTHER
US Environmental Protection Agency	EPA	FEDOTHER

Department of Transportation	DOT	FEDOTHER
Other Federal Land	FEDOTHER	FEDOTHER
Maryland Department of the Environment	MDE	NONFED

<npsbmp:NPSBMPIIdentity>

<npsbmp:DataSource>

<npsbmp:DataSourceName>DDOE2014</npsbmp:DataSourceName>

<npsbmp:DataSourceRefreshDate>2014-01-07</npsbmp:DataSourceRefreshDate>

<npsbmp:DataSourceAccessMethodDescription>

<npsbmp:DataSourceAccessMethodCode>NODE

</npsbmp:DataSourceAccessMethodCode>

<npsbmp:DataSourceAccessMethodCodeDescription>NODE

</npsbmp:DataSourceAccessMethodCodeDescription>

</npsbmp:DataSourceAccessMethodDescription>

<npsbmp:ContactEntityDetails>

<npsbmp:StateIdentity>

<npsbmp:StateCode>DC</npsbmp:StateCode>

<npsbmp:StateName>District Of Columbia</npsbmp:StateName>

</npsbmp:StateIdentity>

<npsbmp:AgencyIdentity>

<npsbmp:AgencyCode>NPS</npsbmp:AgencyCode>

<npsbmp:AgencyName>NPS</npsbmp:AgencyName>

</npsbmp:AgencyIdentity>

<npsbmp:IndividualIdentity>

<npsbmp:IndividualIdentifier>1</npsbmp:IndividualIdentifier>

<npsbmp:FirstName>Rayko</npsbmp:FirstName>

<npsbmp:LastName>Emil</npsbmp:LastName>

</npsbmp:IndividualIdentity>

</npsbmp:ContactEntityDetails>

</npsbmp:DataSource>

</npsbmp:NPSBMPIIdentity>

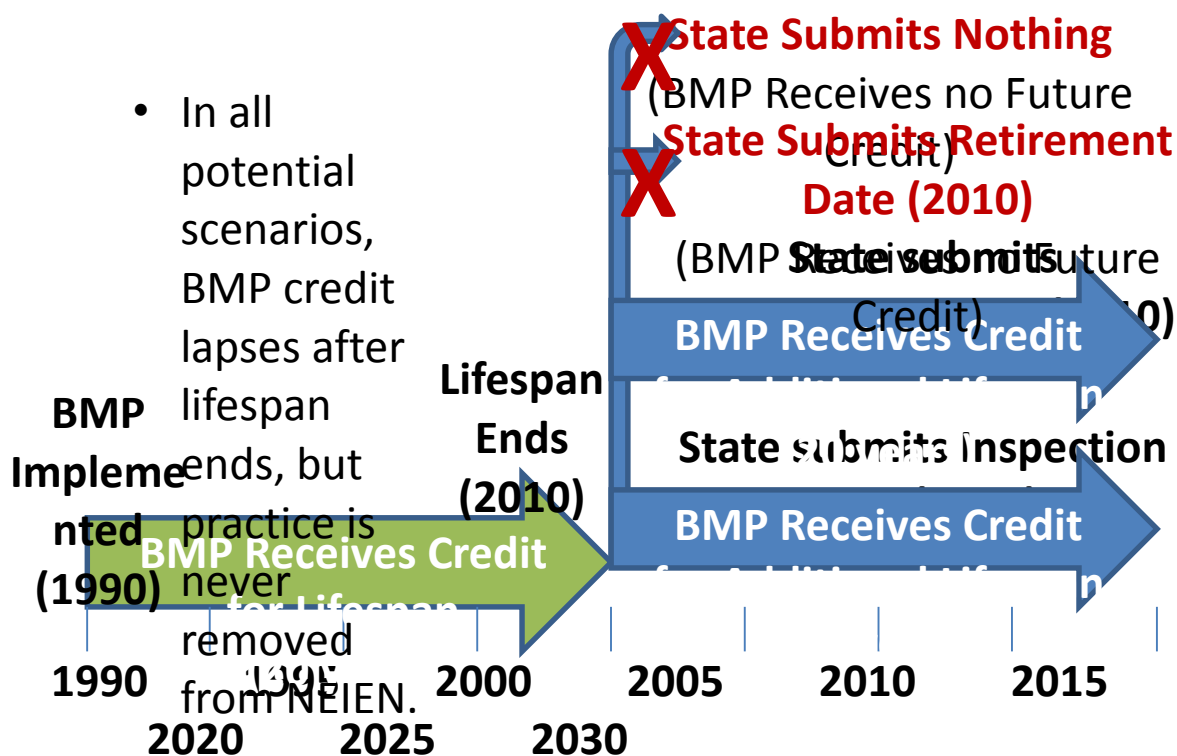
BMP Credit Duration

Source sector workgroups recently reviewed and approved credit durations for each BMP type for the Phase 6 Watershed Model. These credit durations will enable the Partnership to flag BMPs that have been on the ground for many years without being inspected or maintained, and remove those BMPs for model credit unless inspection or maintenance dates are submitted through NEIEN. Jurisdictions should use the “BMP Event Status Codes” and “BMP Event Status Code Date” to add individual dates for implementation (IMP), inspection (INSP), maintenance (MANT) and retired (RET). An example of the use of multiple event state codes is included below along with a chart describing how the modeling tools will use the information to remove BMPs for model credit. This will not be used for Phase 5.

Multiple Event Status Code XML Excerpt

```
<npsbmp:EventStatus>
  <npsbmp:BMPEventStatusCode>IMP</npsbmp:BMPEventStatusCode>
  <npsbmp:BMPEventStatusCodeDescription>Implemented</npsbmp:BMPEventStatusCodeDescription>
  <npsbmp:BMPEventStatusCodeDate>2010-02-01</npsbmp:BMPEventStatusCodeDate>
</npsbmp:EventStatus>
<npsbmp:EventStatus>
  <npsbmp:BMPEventStatusCode>MANT</npsbmp:BMPEventStatusCode>
  <npsbmp:BMPEventStatusCodeDescription>Inspected</npsbmp:BMPEventStatusCodeDescription>
  <npsbmp:BMPEventStatusCodeDate>2014-07-01</npsbmp:BMPEventStatusCodeDate>
</npsbmp:EventStatus>
```

BMP Credit Duration Example



Inspection Pass/Fail Codes

Jurisdictions will now be able to report new elements of “PASS” and “FAIL” under a new schema extension of “Event Status Result Code.” All records that contain an event status code for inspection (INSP) will also now need to contain a result code. Details on the inspection may also be tracked using free, explanatory text under a new schema extension of “Event Status Results Text.” The inspection codes will be used in Phase 6 calibration. Practices which fail an inspection will not receive credit until a follow-up inspection or maintenance activity is submitted. This will not be required for Phase 5. An example of the use of pass/fail codes can be found in the XML excerpt below.

```

<npsbmp:EventStatus>
  <npsbmp:BMPEventStatusCode>INSP</npsbmp:BMPEventStatusCode>
  <npsbmp:BMPEventStatusCodeDescription>Inspected</npsbmp:BMPEventStatusCodeDescription>
  <npsbmp:BMPEventStatusCodeDate>2014-07-01</npsbmp:BMPEventStatusCodeDate>
  <npsbmp:BMPEventStatusCodeResult>PASS</npsbmp:BMPEventStatusCodeResult>
  <npsbmp:BMPEventStatusCodeResultDescription>Passed Inspection
</npsbmp:BMPEventStatusCodeResultDescription>
</npsbmp:EventStatus>

```

NEIEN Appendix Versions

The CBPO and WTWG will soon begin maintaining two NEIEN Appendixes. One appendix will be used for 2015 Progress, while a second appendix will be used for Phase 6. Maintaining two appendixes will allow jurisdictions to report BMPs in the method needed for Phase 5 or Phase 6. This second appendix will have an expanded list of land uses, edits to the default land use groups, and edits to the BMP names included in the current appendix following a review by NRCS, CBPO and the WTWG. Any changes to both appendixes will need to be reviewed and approved by the WTWG before taking effect. A list of the land uses that may be submitted to NEIEN for Phase 6 is included below. There is also a list of proposed Phase 6 Model land uses. There are likely to be changes to this Phase 6 land use list over the next year, and all changes will be communicated to the WTWG. Jurisdictions may request additional Phase 6 land uses be added to the NEIEN land use codes if they are able to track BMPs on these more specific land uses.

Phase 6 NEIEN Land Uses

LAND_USE_CODE	Phase5_Description	Phas6_Description
11	Open Water	Water
12	Perennial Ice/Snow	
21	Low Intensity Residential	All urban lands including roads, buildings and other impervious and turf grass, excluding extractive and construction
22	High Intensity Residential	All urban lands including roads, buildings and other impervious and turf grass, excluding extractive and construction
23	Commercial/Industrial/Transportation	All impervious urban including roads, buildings, parking lots and other impervious areas including those covered by tree canopy
24	Pervious Urban without CSO	All pervious urban lands, including those covered by tree canopy, but excluding CSS
25	Impervious Urban without CSO	All impervious urban lands, including those covered by tree canopy, but excluding CSS
26	Pervious & Impervious with CSO	All impervious and pervious urban CSS lands, including those covered by tree canopy
31	Bare Rock/Sand/Clay	All extractive lands including mines and quarries
32	Quarries/Strip Mines/Gravel Pits	All extractive lands including mines and quarries
33	Transitional	All urban lands including roads, buildings and other impervious and turf grass, excluding extractive and construction
41	Deciduous Forest	All true, disturbed and harvested forest
42	Evergreen Forest	All true, disturbed and harvested forest
43	Mixed Forest	All true, disturbed and harvested forest
51	Shrubland	Open Space

61	Orchards/Vineyards/Other	All fruit, vegetable, nursery and other commodity crops excluding grains, small grains, soybeans, hay and pasture
71	Grasslands/Herbaceous	Open Space
81	Pasture/Hay	All pasture, legume and non-legume hay
82	Row Crops	All grains, small grains and soybean crops excluding hay, pasture and specialty crops such as fruits, vegetables, etc.
83	Small Grains	All grains, small grains and soybean crops excluding hay, pasture and specialty crops such as fruits, vegetables, etc.
84	Fallow	All grains, small grains and soybean crops excluding hay, pasture and specialty crops such as fruits, vegetables, etc.
85	Urban/Recreational Grasses	All pervious urban turf grass including areas covered by tree canopy
91	Woody Wetlands	All emergent tidal, fresh and woody wetlands
92	Emergent Herbaceous Wetlands	All emergent tidal, fresh and woody wetlands
Agric	Agricultural	All agricultural lands including grains, small grains, soybeans, hay, pasture, specialty crops, but excluding animal operation and farmstead areas
cid	Impervious in CSO	All impervious urban CSS lands, including those covered by tree canopy
cpd	Pervious in CSO	All pervious urban CSS lands, including those covered by tree canopy
CSO	Combined Sewer Overflow	All impervious and pervious urban CSS lands, including those covered by tree canopy
HayAl	Hay+Alfalfa	All legume and non-legume hay
Past	Pasture	Pasture
RowHa	Row+Hay	All grains, small grains and soybean and specialty crops such as fruits, vegetables, etc., excluding hay and pasture.
Urban	Urban	All urban lands including roads, buildings and other impervious and turf grass, excluding extractive and construction
Nurs	Nursery	All fruit, vegetable, nursery and other commodity crops excluding grains, small grains, soybeans, hay and pasture
Alf	Alfalfa	All legume and non-legume hay
RegUrb	Regulated Urban	All regulated urban impervious and pervious lands, including those covered by tree canopy, but excluding CSS lands
rpd	Regulated Pervious Urban	All regulated urban pervious lands, including those covered by tree canopy, but excluding CSS lands
rid	Regulated Impervious Urban	All regulated urban impervious lands, including those covered by tree canopy, but excluding CSS lands
UnRegUrb		All non-regulated urban impervious and pervious lands, including those covered by tree canopy
UnRegPU		All non-regulated urban pervious lands, including those covered by tree canopy
UnRegIU		All non-regulated urban impervious lands, including those covered by tree canopy
UrbNoCSS		All impervious and pervious urban lands, including those covered by tree canopy, but excluding CSS

RegIUWCSS		All regulated and CSS urban impervious lands, including those covered by tree canopy
UnRegUrbWCSS		All non-regulated and CSS urban impervious and pervious lands, including those covered by tree canopy
UnRegPUWCSS		All non-regulated and CSS urban pervious lands, including those covered by tree canopy
UnRegIUWCSS		All non-regulated and CSS urban impervious lands, including those covered by tree canopy
RegUrbWCSS		All regulated and CSS urban impervious and pervious lands, including those covered by tree canopy
RegPUWCSS		All regulated and CSS urban pervious lands, including those covered by tree canopy
Septic		All Septic systems
Npfeed		Non-Permitted Feeding Space
Pfeed		Permitted Feeding Space
Feed		All animal operation area
Con		All construction

Green text was submitted previously.

Red text is recommended for removal.

Black text has never been submitted.

Proposed Phase 6 Model Land Uses (As of May 7, 2015)

LULongName	LUShortName
Non-Regulated Roads	nir
CSS Roads	cir
MS4 Roads	mir
Non-Regulated Buildings and Other	nnr
CSS Buildings and Other	cnr
MS4 Buildings and Other	mnr
Non-Regulated Turf Grass	ntg
CSS Turf Grass	ctg
MS4 Turf Grass	mtg
Non-Regulated Tree Canopy	ntc
CSS Tree Canopy	ctc
MS4 Tree Canopy	mtc
CSS Construction	ccn
MS4 Construction	rcn
Forest	for
Harvested Forest	hfr
Disturbed Forest	dfr
Water	wat

Open Space	osp
Tidal Wetland	twl
Floodplain Wetland	fwt
Headwater Wetland	hwt
Grain with Manure	gwm
Grain without Manure	gom
Silage with Manure	swm
Silage without Manure	som
Small Grains and Soybeans	sgs
Full Season Soybeans	soy
Small Grains and Grains	sgg
Other Agronomic Crops	oac
Pasture	pas
Legume Hay	lhy
Other Hay	ohy
Ag Open Space	aop
Specialty Crop High	sch
Specialty Crop Low	scl
Farmstead	far