

Chesapeake Bay Program Partnership's Basinwide BMP Verification Framework

CBP Management Board

September 11, 2014



Verification Definition

“Verification: the process through which agency partners ensure practices, treatments, and technologies resulting in reductions of nitrogen, phosphorus, and sediment pollutant loads are implemented and operating correctly.”

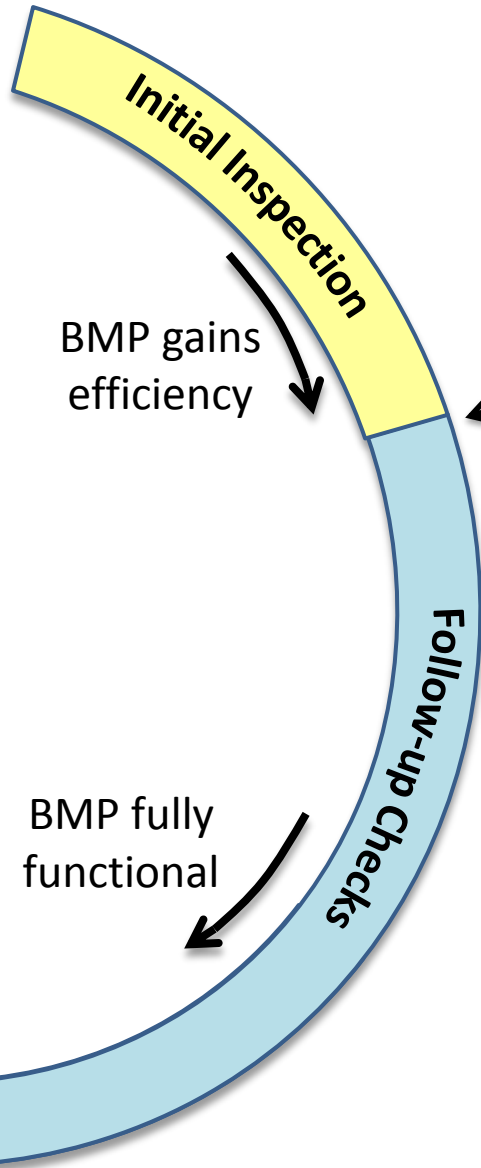
BMP Verification Life Cycle

BMP no longer present/functional removed from database

OR

BMP verified/ upgraded with new technology

BMP installed, verified, and reported by Jurisdiction



Data quality assurance/ validation

BMP gains efficiency

BMP fully functional

BMP nears end of life span

BMP performance metrics collected

BMP lifespan ends – re-verify

BMP Performance

Follow-up Checks

Initial Inspection

Verification Framework Accomplishments

- ✓ BMP verification principles adopted
- ✓ BMP Verification Review Panel convened
- ✓ Source sector verification guidance drafted
 - Agriculture
 - Forestry
 - Stormwater
 - Wastewater/septic systems
 - Wetlands
 - Streams

Verification Framework Accomplishments

- ✓ Developed 12 framework elements
- ✓ Circulated 3 drafts of framework document
- ✓ Engaged the Partnership at all levels
 - Source Sector and Habitat Workgroups
 - Goal Implementation Teams (WQ, Habitat, Fisheries, Healthy Watersheds)
 - Advisory Committees (STAC, CAC, LGAC)
 - Management Board, Principals' Staff Committee

12 Framework Elements

- 1) BMP verification principles
- 2) BMP Verification Review Panel
- 3) Source sector and habitat specific BMP verification guidance
- 4) Practice life spans
- 5) Ensuring full access to federal cost-shared agricultural conservation practice data
- 6) Enhance data collection and reporting of federally cost shared practices

12 Framework Elements

- 7) Accounting for non-cost shared practices
- 8) Preventing double counting
- 9) Clean-up of historic BMP databases
- 10) Development and documentation of jurisdictional BMP verification programs
- 11) Partnership processes for evaluation and oversight
- 12) Communications and outreach

Panel's Recommendations

- Use the Panel's Products
 - Verification program design matrix
 - 14 verification program development decision steps
 - State protocol components checklist
- Address certification/training of verifiers
- Aim high or explain why
- Prioritize verification towards priority practices
- Robust upfront verification yields less intensive follow up reviews
- Build in time for continuous improvement early

Panel's Verification Tools

Chesapeake Bay Program Best Management Practice Verification Program Design Matrix

A. Program Component	B. Program Elements	C. Program Element Options
j. BMP Verification	1. What was the driver for BMP Installation?	Regulation, Cost-share, Non-cost-share
	2. How many BMPs will be inspected?	All, percentage, subsample, those targeted
	3. How is the frequency and location of inspection?	Statistics, targeting, low-visibility funding
	4. How often BMPs inspected?	
	5. What is the...	
	6. Who will inspect and certify/train?	

Jurisdictional BMP Verification Program Development Decision Steps for Implementation

Below are the 14 steps for each Chesapeake Bay watershed jurisdiction to consider when developing their jurisdiction's BMP verification program. Under each step are questions for consideration which will prompt decisions that may be needed to develop jurisdiction's verification protocols.

1) Determine what BMP's to collect:

- a) Do you want to collect all BMPs that were listed to in your jurisdiction's Phase II WIP? Additional/or some of
- b) Do the listed BMPs meet the Chesapeake Bay Program (CBP) definition?
- c) Do you want to report BMPs that do not meet NRCS standards for sediment pollutant load?
- d) When collecting the data, do you want to include BMPs that are not reported?
- e) For reported BMPs, are you going to do a determination (example: date, fertilization if any)

State Protocol Components Checklist

State Protocol Components Checklist				
State:				
Sector:				
BMP Verification		Present	N/A	Comments
1	BMP's Collected			
	Type (Structural, Management, Functional Equivalent, Etc)			
	BMP Funding/Cost shared (Federal, State, NGO, Non-cost shared)			
	Distinct State Standards/Specifications			
	Matching CBP Definition/Efficiencies			
2	Method/ System of Verification/Assessment			
	Description of Methods/Systems To Be Used			
	Documentation of procedures used to Verify BMP's			
	Instruction Manual for system users			

Chesapeake Bay Program Partnership Groups Told Us:
State Verifications Protocols Must Have (6 R's):
RIGHT Amount of **RIGOR** to **RELIABLY REPORT** BMP's
within the **REALITY** of **RESOURCES**



Illustration of Diversity of Verification Approaches Tailored to Reflect Practices

Sector	Inspected	Frequency	Timing	Method	Inspector	Data Recorded	Scale
Stormwater	All	Statistics	<1 year	Monitoring	Independent	Water quality data	Site
	Percentage	Targeting	1-3 yrs	Visual	Regulator	Meets Specs	Subwatershed
	Subsample	Law	3-5 yrs	Aerial	Non-Regulator	Visual functioning	County
	Targeted	Funding	>5 yrs	Phone Survey	Self	Location	State
Agriculture	All	Statistics	<1 year	Monitoring	Independent	Water quality data	Site
	Percentage	Targeting	1-3 yrs	Visual	Regulator	Meets Specs	Subwatershed
	Subsample	Law	3-5 yrs	Aerial	Non-Regulator	Visual functioning	County
	Targeted	Funding	>5 yrs	Phone Survey	Self	Location	State
Forestry	All	Statistics	<1 year	Monitoring	Independent	Water quality data	Site
	Percentage	Targeting	1-3 yrs	Visual	Regulator	Meets Specs	Subwatershed
	Subsample	Law	3-5 yrs	Aerial	Non-Regulator	Visual functioning	County
	Targeted	Funding	>5 yrs	Phone Survey	Self	Location	State

Framework Implementation

Decision Making Roles with the CBP

- CBP BMP Verification Review Panel
- CBP Principals' Staff Committee
- CBP Advisory Committees
- CBP Technical Workgroups
- Jurisdictions
- Federal Agencies and Federal Facilities
- U.S. EPA

Framework Implementation

Evaluation and Oversight

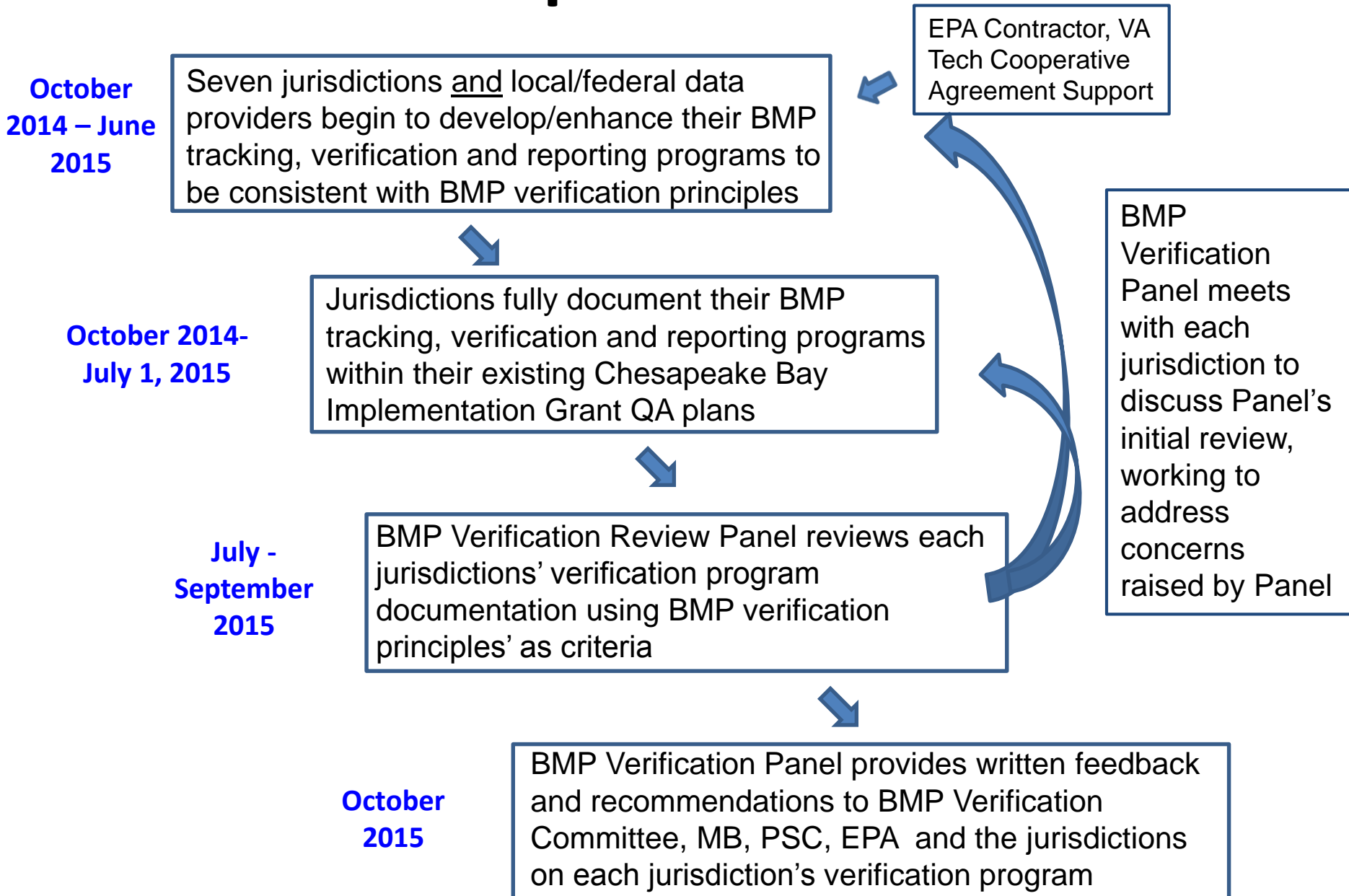
- Amend Partnership BMP protocol to address verification
- Amend CBP Grant Guidance
- Annual reviews of progress data submissions
- Annual EPA reviews of changes to jurisdictions' quality assurance plans
- Periodic EPA audits of jurisdictions' BMP verification programs

Framework Implementation

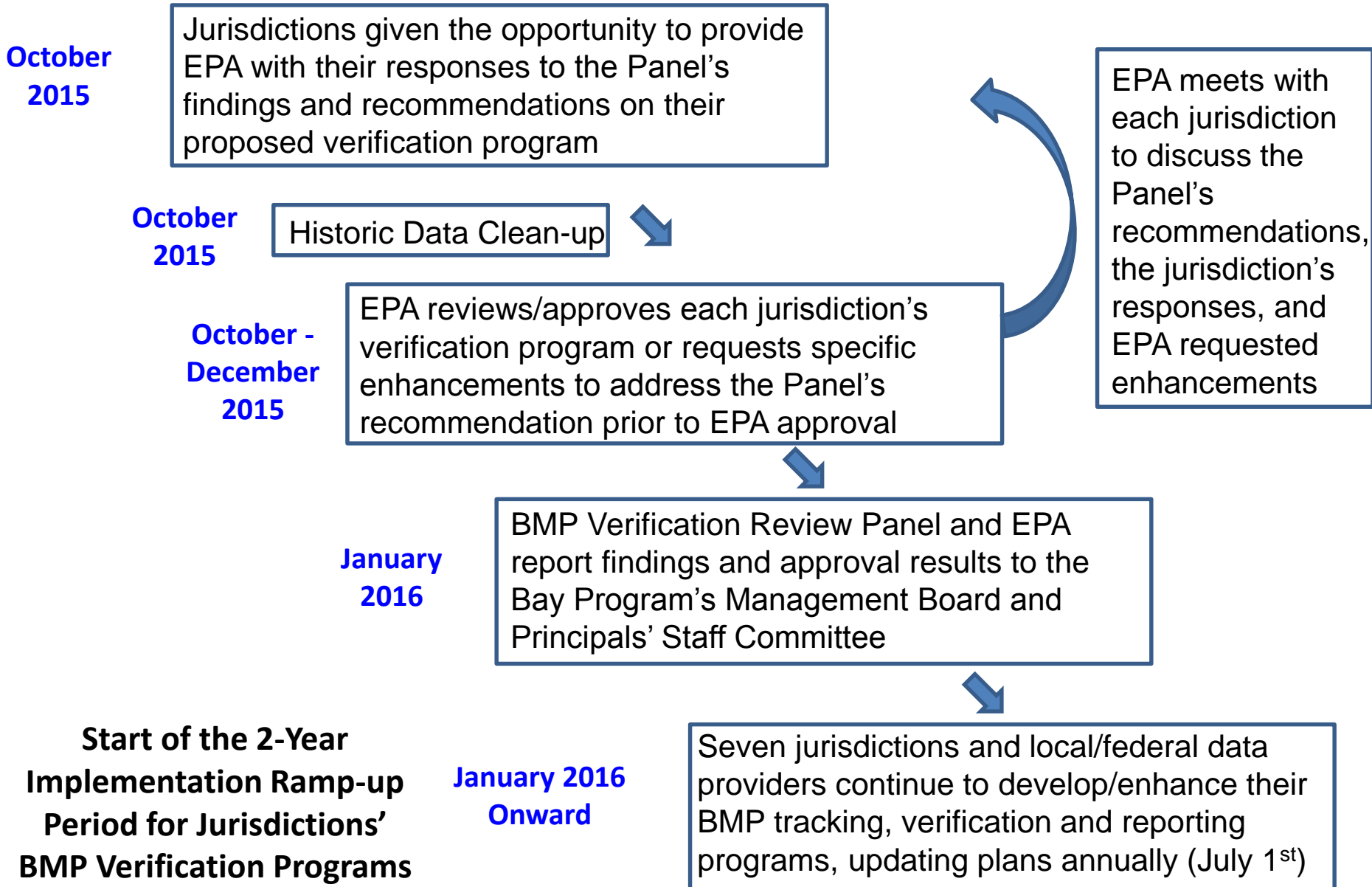
Other Implementation Elements

- BMP Verification Principles
- BMP verification guidance
- BMP data transparency, privacy, and public access
- Practice lifespans
- Ensuring jurisdictions' full access to federal conservation practice data
- Clean-up of historical BMP databases
- Annual progress reporting
- Ongoing CBP Communications Strategy

Framework Implementation Timeline



Framework Implementation Timeline



Framework Implementation Timeline

July 1, 2016,
July 1, 2017

The jurisdictions update their Chesapeake Bay Implementation Grant QA plans to document verification program enhancements

December
2017 – April
2018

The jurisdictions develop 2018-2019 Milestones understanding that BMP verification rules will apply beginning with the 2018 Progress run

July 1, 2018

The jurisdictions update their Chesapeake Bay Implementation Grant QA plans to document verification programs fully consistent w/principles

January –
October
2018

The jurisdictions develop Phase 3 WIPs with input from local and federal partners. WIPs will include descriptions of relevant verification program elements.

December
2018

Full Verification Implementation: Effective for the 2018 Progress run meaning practices for which documentation of verification has not been provided may not be credited

Current Text: In the first full annual progress reporting cycle coming two years after the date of adoption of the basinwide BMP verification framework by the Principals' Staff Committee, those reported practices, treatments or technologies for which documentation of verification has not been provided through each jurisdictions' NEIEN-based report systems may not be credited for nitrogen, phosphorus or sediment pollutant load reductions for that year.

➡ Un-clear to exactly when this would take effect

Recommended Revised Text: Effective for the 2018 Progress run, due December 2018, those reported practices, treatments or technologies for which documentation of verification has not been provided through each jurisdictions' NEIEN-based report systems may not be credited for nitrogen, phosphorus or sediment pollutant load reductions for that year.

➡ Makes it clear would take effect for the 2018 Progress run due Dec. 2018 (following the 2017 Chesapeake Bay TMDL Midpoint Assessment)

Requests for Decision

Decision Requested: Management Board's approval to change effective date for reporting verified practices from 2 years after the date of PSC adoption of basinwide framework to 2 years after the date of EPA approval of jurisdictions' BMP verification programs.

Requests for Decision

Decision Requested: Management Board's approval to present the basinwide BMP verification framework to the Principals' Staff Committee at their September 22nd meeting for their review and final approval on behalf of the larger partnership.

Questions and Discussion

BMP Verification Communications Strategy (1 - 2 Years)

GOALS

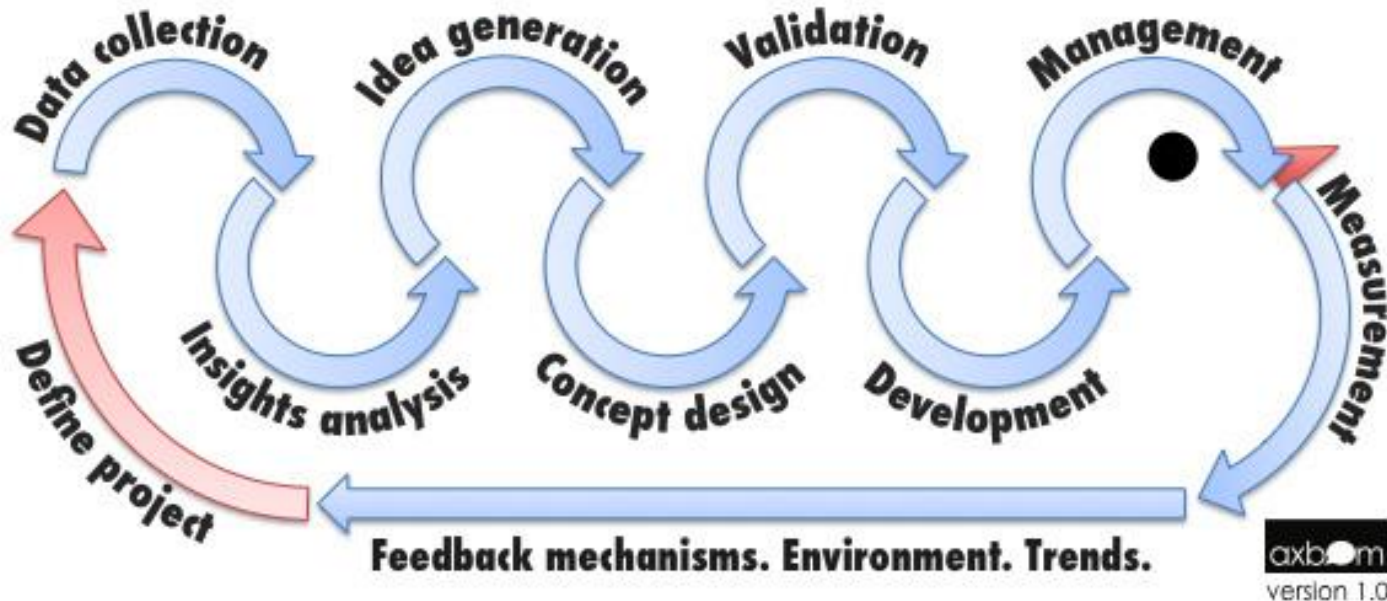
- **Build understanding and support** for BMP V as a watershed-wide, partnership effort
- **Ensure consistent messaging** from/by targeted audiences*
- **Manage expectations** w/in the partnership and increase understanding **of framework implementation**

* See next slide

BMP Verification Communications Strategy (1 - 2 Years)

- Why only 2 years? Adaptive management, adaptive communications....

Axbom Innovation
Lifecycle of successful ideas



BMP Verification Communications Strategy (1 - 2 Years)

GOALS



- **Build support**
for BMP V as watershed-wide, partnership effort
- **Ensure consistent messaging**
from/by targeted audiences*
- **Manage expectations**
w/in partnership
- **Increase understanding**
of framework implementation

Communications Strategy – 1-2 Years

AUDIENCE(s)

Everyone connected to the CBP partnership

- CBP Leaders (EC, PSC, MB – members and alternates)
- Advisory Committees (leaders/members)
- GITs (leaders/members)
- Workgroups & Action Teams (leaders/members)
- Jurisdictional/federal *leads* for sectors
- Jurisdictional/federal *staff* for various sectors
- Primary oversight groups



Communications Strategy – 1-2 Years

MESSAGES

- **Accuracy**
 - Know things are working as they should
 - Show us what's working and where changes are needed
- **Rewarding Efforts**
 - Ensures that everyone making an effort is being accurately credited for their work
 - Helping ppl know that their actions do count
- **Collaboration**
 - All CBP partners working together for common goal
 - Consistent tracking can help in sharing info on what works
 - With better info, everyone's work can be more accurate/easier

Communications Strategy – 1-2 Years

TIMELINE / PRODUCTS

Upon approval	<ul style="list-style-type: none"> ● Formal letter or similar from leadership to all in CBP
1 st & 2 nd Quarters after approval	<ul style="list-style-type: none"> ● Print Materials Examples: BMP V Framework Exec Sum, Rack card, one-pager or similar ● Presentations for use by partners/staff/leadership ● “Road Show” plan
3 rd & 4 th Quarters after approval	<ul style="list-style-type: none"> ● Begin 1 year “Road show” to promote, engage, inform Examples: Webinars, presentations at events, articles in professional/agency/association publications ● Additional CBP Products for potential development Examples: BMP Verification webpage(s), Videos/New Stories
5 th – 6 th Quarters after approval	<ul style="list-style-type: none"> ● Creation of Targeted Outreach Strategies – plans for reaching and engaging next levels of audiences beyond those defined here, including more local source sectors and practice implementers (CBP to support; created by jurisdictions/federal staff)
Ongoing	<ul style="list-style-type: none"> ● Use of existing CBP Communications channels/products – ie: videos/photos, news/features, articles, editorials, social media

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