



2017-2025 Milestones Introducing New Information

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2017-2025 Milestones

Introducing New Information

- Our state partners are asking for:
 - 1) Incorporation of new data and methods AND
 - 2) Ability to explain progress in the context of that new data and methods,
e.g. To what degree are loads improving?
- New data and methods can include:
 - Landuse acres, e.g., crops, impervious
 - Animal populations (e.g, Ag census)
 - BMP efficiencies (e.g., BMP expert panels)
 - How we project watershed conditions into the future



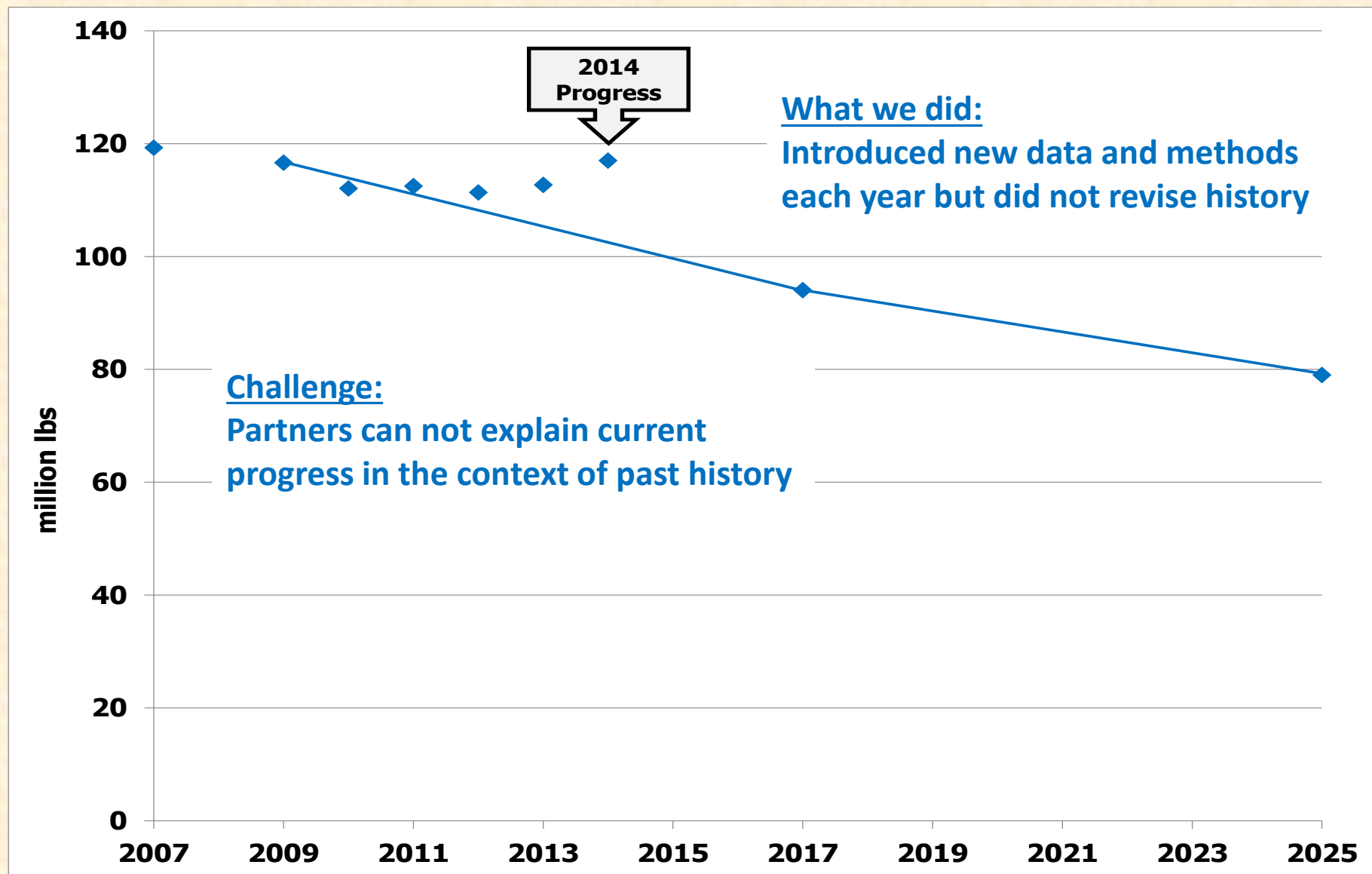
2017-2025 Milestones

Introducing New Information

- How frequently do we include updated data and methods?
 - Currently annually, but this is a Partnership decision made on a case-by-case basis
 - **Proposal is:**
 - ✓ **Update with new data every 2 years**
 - ✓ **Within a milestone period, keep with what's available at time of milestone development**
 - ✓ **Update historical progress when new data/methods are incorporated**
 - ✓ **Begin with 2017 Milestone development**

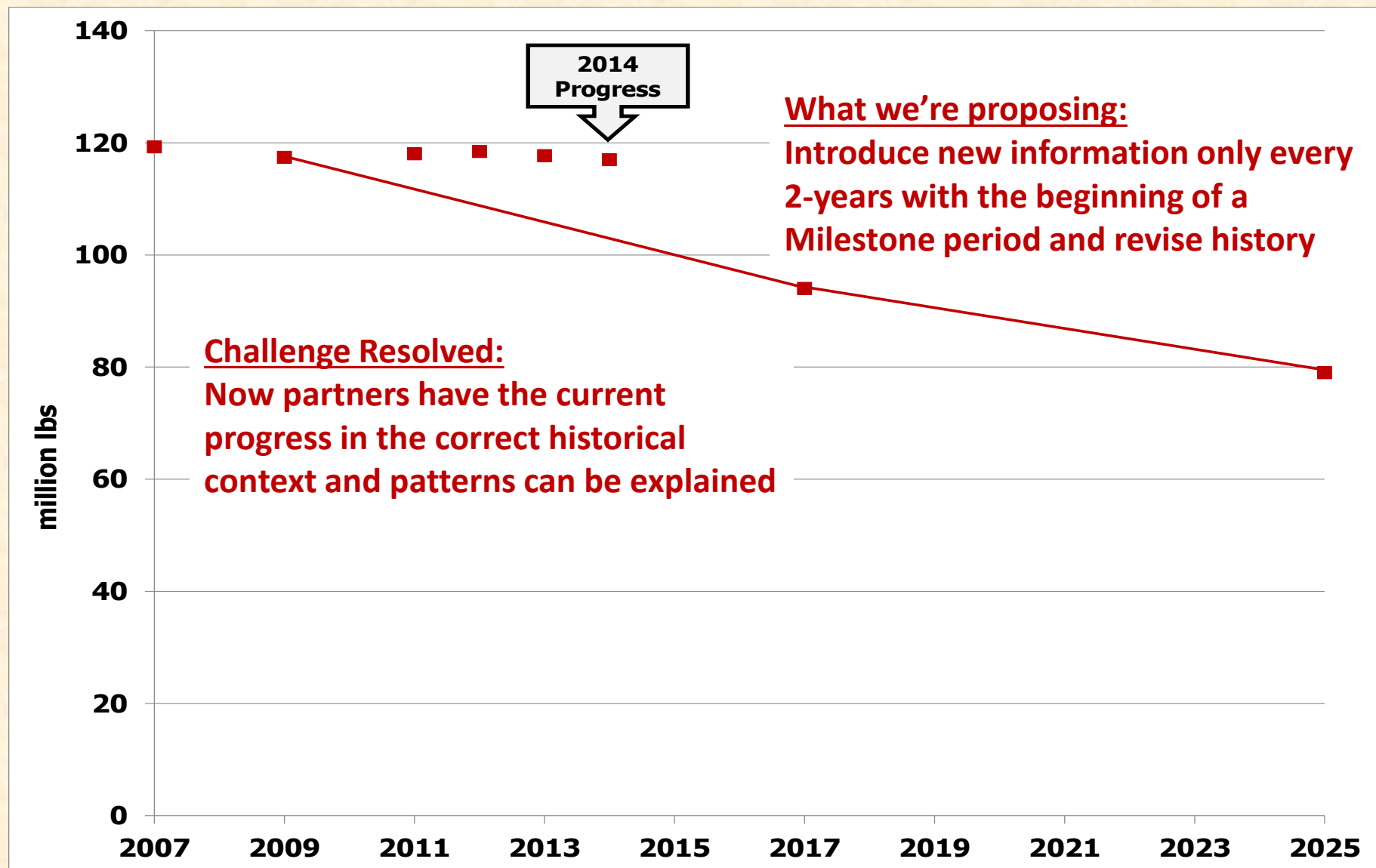


Nitrogen Loads and Goals All Sources



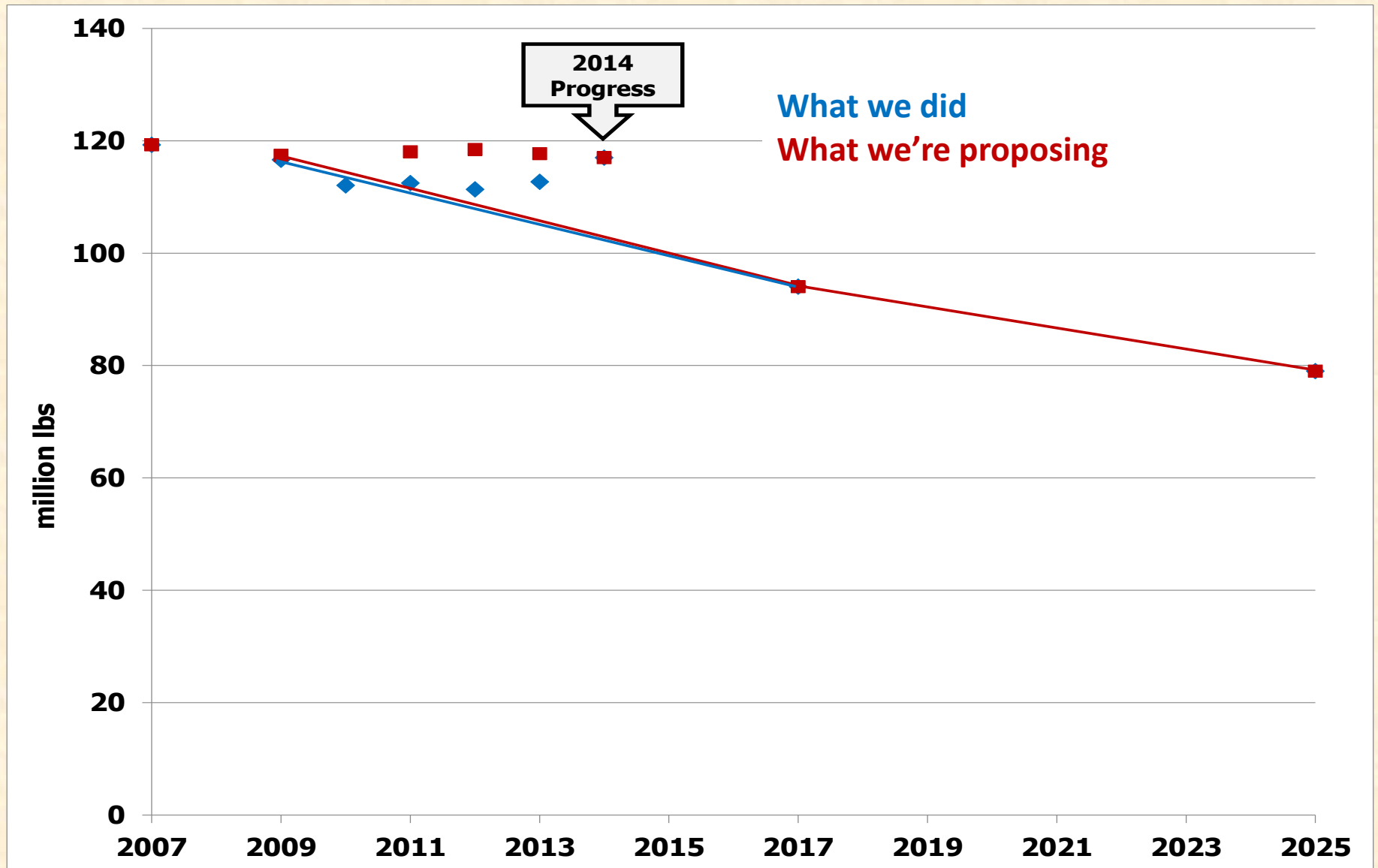


Nitrogen Loads and Goals All Sources





Nitrogen Loads and Goals All Sources





2017-2025 Milestones

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- Pros:
 - Measuring change in a Milestone period due to BMPs and predicted changes in conditions
 - Incorporates the latest data and methods – every 2 years
 - History measures on-the-ground changes as well
 - Can say whether things are getting better or worse – and why
 - 2025 target doesn't change



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- Cons:
 - Loads history is different from what was previously reported
 - The 2017 target and slope of the 2017 trajectory can change
 - 2 Progress runs
 - One for evaluation of achievement of goals with original data
 - One for beginning next Milestone period with new data
 - Difficult to explain to an Expert Panel, partners, sector communities that their work/data will be used in (up to) 2 years



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- Are you comfortable with this approach?
- Alternative Approaches:
 - Status quo = Introduce new data and methods each year and do not revise reported historic loads.
EPA numeric evaluations each year.
 - Introduce new data and methods each year and revise reported historic loads each year.
EPA numeric evaluations each year – or not.
 - Other approaches



2015 Progress

Introducing New Information

- New data has already been introduced with the mid-Milestone 2014 Progress scenario.
- This year's 2015 Progress shifts from new data and methods will, likely, be the Nutrient Application Management Tiers – reported acres and efficiency changes and any adjustments for compliance accounting.
- EPA's numeric load evaluations will primarily compare 2015 Progress with the original 60% trajectory.



How we could do this moving forward (2019 Milestone example)

- Jurisdictions will finalize 2017 Progress
 - The same data and methods used for developing the 2017 Milestones will be used in this version of the 2017 Progress run.
- Jurisdictions will develop 2019 Milestones using the best data and methods at the time – including projections to 2019 conditions in the watershed.
- This same data and methods will also be used to update historic Progress runs beginning with 2009 Progress and ending with 2017 Progress
 - All that's quantified by these model runs reflects the effects of management actions and changing conditions in the watershed, not swings in loads from introducing new information.



How we could do this moving forward

(2019 Milestone example)

- 2018 Progress will be at the mid-point of the 2019 Milestone period.
 - There will be a mid-term EPA evaluation of progress toward programmatic goals.
 - There will NOT be an EPA evaluation of the status of meeting numeric targets, but 2018 Progress results will be used for reporting on other annual measures.
 - 2018 Progress will NOT include new data and methods that have been obtained/finalized since the 2019 Milestones were developed.
- 2019 Progress will be used for both numeric and programmatic EPA evaluations.
 - It will NOT include new data and methods that have been obtained/finalized since the 2019 Milestones were developed.
 - However, any new data and methods will be included in the projections made for 2021 for development of the jurisdictions' 2021 Milestones.