

WRAP OGWG: O&G EI

PHASE 2 STATUS UPDATE

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OUTLINE

Survey Compilation

01

Forecast Scenarios

02

Looking Forward

03

01 SURVEY COMPILATION

- Operator surveys in progress and expected to be completed per each state agency's survey timeline
- Compile and analyze survey data for each basin
 - Review and identify missing survey fields or survey fields where additional information is necessary to understand the data provided
 - Follow-up with operators (*coordinate with state agencies to the extent necessary*)
 - Estimate the fraction of activity represented by returned surveys
 - Estimate emission rates by basin
 - By source category
 - By well type (oil, gas, or cbm) and/or spud type (horizontal, directional, or vertical)
 - On-the-books controls status to be informed by survey results
 - Describe how these inputs will inform the future year inventory
- Documentation via technical memo
- *Agency involvement: survey data provision, operator follow-up (to the extent necessary), memo review*

02 FORECAST SCENARIOS

- Scope:
 - 2028 future year (based on 2023 emission rates and activity forecasts)
- Ramboll is currently identifying O&G activity forecasts *methods*
 - For basins with the most substantial O&G activity
 - Based on historical trends
 - Level-of-detail: well type (oil/gas/cbm) and/or spud type (horizontal, directional, vertical)
- Agency input/consultation:
 - Provide any input on the basin list by Feb. 19th
 - Review basin specific forecast *methods* in late-February
 - Consultation meetings in early-March
 - Review of forecast

State(s)	Basin / Forecast Area
AK	Arctic Coastal Plains Province, Cook Inlet Basin
CO, WY	Denver Basin, Piceance Basin
MT	Sweetgrass Arch
MT, ND, SD	Williston Basin
NM	Permian Basin
UT	Paradox Basin, Uinta Basin
WY	Big Horn Basin, Green River Basin, Powder River Basin, Wind River Basin
Other Alaska Basins	
Other Rocky Mountain Basins	

*ARB to provide CA inventories

03 STATUS, SCHEDULE AND LOOKING AHEAD

- Task 1: Base Year Inventory
 - Complete: Base year (version 1) inventory and O&G activity complete
 - In-progress: Survey (*as described in previous meetings, due to timeline, survey emphasis is on informing future year inventory*)
 - Next steps: Support to operators filling-out of survey, WEA involvement, survey compilation
 - Agencies to provide completed operator surveys on state specific timelines & review subsequent survey compilation memo
- Task 2: Forecast 2028 Inventory (On-the-books controls)
 - Completed: Compilation of historical activity
 - In-progress: Developing O&G activity forecast scenarios
 - Agencies to review, comment and participate in teleconferences in late-February, early-March
- Not yet started
 - Task 3: Forecast 2028 Inventory (Additional reasonable controls)
 - Task 4: O&G Program and Emission Management Review
 - EPA Modeling Platform Review (pending EPA release)

03 STATUS, SCHEDULE & LOOKING AHEAD

Activity	2019												
	Feb	Mar	Apr	May	Summer	Fall	Winter						
Task 1: Base Year Inventory & Survey													
Operators fill-out surveys	■	■	■	■	■								
All surveys provided to Ramboll by				■									
Ramboll compiles and analyzes survey data by March 22	■	■	■	■	■	■	■	■					
Ramboll delivers survey results memorandum								■					
WRAP OGWG members provide comments on survey results memo								■	■				
Ramboll incorporates survey results into base year inventory	■	■	■	■	■	■	■	■	■				
Ramboll delivers draft version 2 base year inventory and report									■				
WRAP OGWG comments on draft base year inventory (v2) and report										■	■		
Ramboll Modeling Platform Review	■	■	■	■	■	■	■	■					
Ramboll delivers modeling platform review results									■				
Task 2: Future Year Inventory: On-the-books and On-the-way (OTB and OTW) Controls													
Identify forecast scenarios	■	■	■	■	■	■	■	■	■	■	■		
OTB and OTW Emission Controls	■	■	■	■	■	■	■	■	■	■	■		
OTB and OTW controls future year inventory and report													
										Task 3: Future Year Inventory: Additional Reasonable Controls			
Identify Additional Reasonable Controls for Oil and Gas Sources													
Additional Reasonable controls future year inventory and report													
										Task 4: O&G Programs and Emission Management			
Identification and Review of Member Agency Oil & Gas Programs													

■ Project Management Team and Ramboll Collaborative Activity
 ■ State agency / operator activity



QUESTIONS?