

Tutorial on New Phase 3 Reporting

The Reporting Deep Dive Team included:

Renata McCoy, Mark Petersen, Wuyin Lin, Gautam Bisht, and Robert Jacob.

E3SM Phase 3 Reporting Goals

- **Simplicity:** minimize time spent reporting
- **Accountability:** everyone participates in reporting
- **Visibility:** easy to see work across project
- **Continuity:** roadmaps, epics, reports and retrospectives are cohesive

E3SM Phase 3 Reporting has two components:

1. Roadmaps

- Created by Group Leaders
- For planning and retrospection
- Periods: 3-year, 1-year, Quarter

2023.Q1: GroupName Quarterly Roadmap (Jan 2023 - Mar 2023)

Created by Renata McCoy
 Last updated: just a moment ago by Mark Petersen · 1 min read · 7 people viewed · Attachments

Major Goal	Epics	Epic Lead	FTEs	Priority (1 or 2)	Retrospective
Model component support	V3 Coupled Model Support	@Mark Petersen	0.5	1	
Model component support	Code maintenance and Simulation Campaign Support	@Renata McCoy	0.5	1	
Model component support	COREv3 flux scheme and finish WW3 integration	@Gautam Bisht	0.25	1	
Waves	WW3 Wave set up in three-dimensional ocean		0.75		
Waves	WW3 Wave source term emulation	@Robert Jacob	0.5	2	
Publications	v3/v4 Manuscripts	@Wuyin Lin	0.5	2	
	Collaborate with QUESA on design		1		

2. Epics

- Created by Epic Leads
- Each epic on a single confluence page
- Bi-weekly reporting by epic team

Stacked Shallow Water Code (sample epic)

Created by Renata McCoy
 Last updated: just a moment ago by Mark Petersen · 1 min read · 6 people viewed · Attachments

Epic Lead	@Renata McCoy
Epic Team	@Renata McCoy @Mark Petersen
Group	GroupName
Tasks	<ol style="list-style-type: none"> 1. c++ examples with YAKL for tendency term functions 2. convergence tests for spatial operators 3. Team reviews and approves standard format for arrays and loops
Expected FTE	1
Bi-Weekly Report 1	PROBLEM tested miniweather app on summit. Not compiling on Perlmutter. Seeking help with infrastructure team.
Bi-Weekly Report 2	ON TRACK Altered miniweather app to solve 1D shallow water equations. Now compiled and tested on both summit and Perlmutter.
Bi-Weekly Report 3	
Bi-Weekly Report 4	
Bi-Weekly Report 5	
Bi-Weekly Report 6	
Bi-Weekly Report 7	
Quarterly Report by Epic Lead	DONE 2D stacked shallow water equation solver is now working with YAKL. Not yet running with MPI. Convergence plots for s

New Confluence Space

Every group has a subdirectory: Roadmaps and Reporting

Land Roadmaps and Reporting

RM Created by Renata McCoy
Last updated: Feb 04, 2023 • 1 min read • 2 people viewed

E3SM-Phase3 Land

- Pages
- Group Members
- Land Roadmaps and Reporting**
 - 3-year Land Roadmaps
 - 1-year Land Roadmaps
 - Quarterly Land Roadmaps, Epics and Reporting

- 3-year Land Roadmaps
 - Template -- 2023-2025: Land 3-year roadmap
 - 2023-2025: Land 3-year roadmap (example)
- 1-year Land Roadmaps
 - Template -- 2023: Land 1-year Roadmap
 - 2023: 1-Year Land Roadmap (example)
- Quarterly Land Roadmaps, Epics and Reporting
 - 2023.Q1: Quarter - Land (Jan 2023 - Mar 2023)
 - Template -- 2023.Q1: Land Quarterly Roadmap (Ja
 - 2023.Q1: Land Quarterly Roadmap (Jan 2023 - Ma
 - 2023.Q1: List of Epics by Land Member
 - 2023.Q1: Land Group Epics & Reports
 - Template Epic Page
 - Couple FATES multi-level canopy capability to I
 - Implement redox chemistry (sample epic)
 - Stacked Shallow Water Code (sample epic)
 - 2023.Q1: Land Summary Report
 - 2023.Q1: Effort Reporting - Land

New Roadmaps & Reporting Space collects reports across all groups

<https://acme-climate.atlassian.net/wiki/spaces/E3RR>

E3SM-Phase 3 Roadmaps & Reporting

- Pages
- E3SM Phase 3 Roadmaps & Reporting
 - > 3-year Roadmaps All Groups
 - > 1-year Roadmaps All Groups
 - > Quarterly Roadmaps & Reports All Groups
 - > Template -- GroupName Roadmaps and Reporting
- Instructions
 - Group leader instructions for phase 3 reporting
 - Epic Lead instructions for phase 3 reporting
 - Team Member instructions for phase 3 reporting
- Examples of Roadmaps and Epics

Aggregated Roadmaps and Reports

- 3-year Roadmaps All Groups
 - 2023-2025: 3-year Roadmaps All Groups
- 1-year Roadmaps All Groups
 - 2023: 1-year Roadmaps All Groups
- Quarterly Roadmaps & Reports All Groups
 - 2023.Q1: Quarter (Jan 2023 - Mar 2023)
 - 2023.Q1: Quarterly Roadmaps All Groups
 - 2023.Q1: List of Epics by E3SM Staff Mem
 - 2023.01.13: Bi-Weekly Reports on Epics
 - 2023.01.27: Bi-Weekly Reports on Epics
 - 2023.Q1: Quarterly Reports on Epics
 - 2023.Q1: Summary Reports
 - 2023.Q1: Effort Reporting

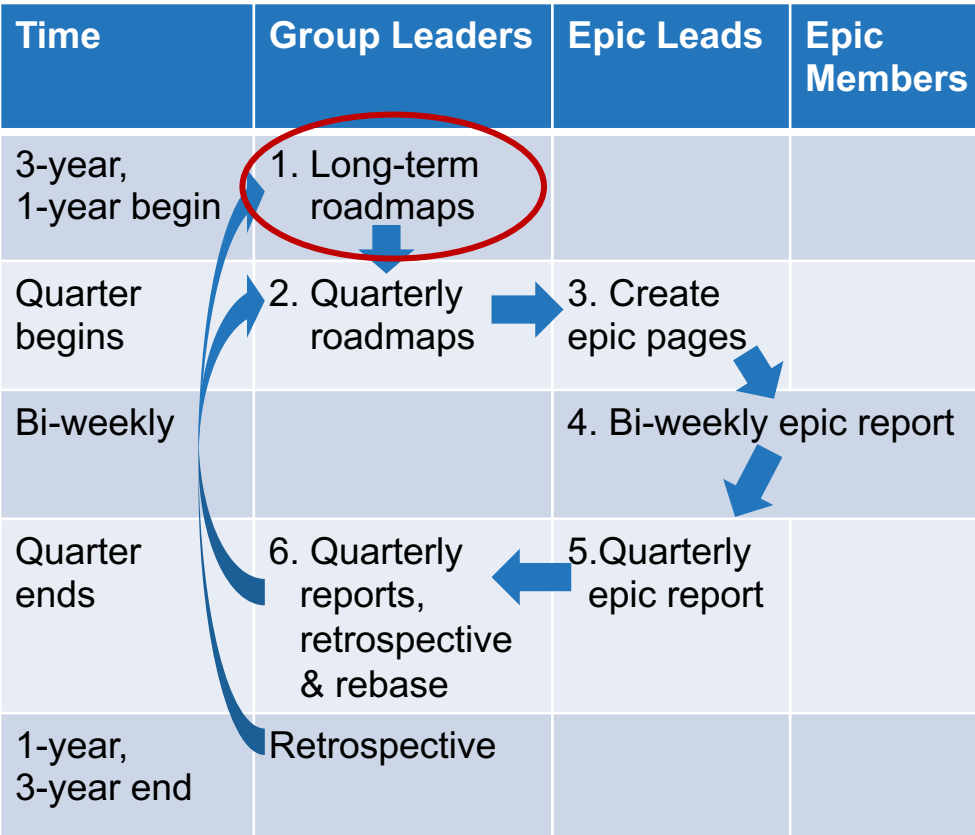
Reporting instructions here!

<https://acme-climate.atlassian.net/wiki/spaces/E3RR/pages/3661267008/Instructions>

Time	Group Leaders	Epic Leads	Epic Members
3-year, 1-year begin	1. Long-term roadmaps		
Quarter begins	2. Quarterly roadmaps	3. Create epic pages	
Bi-weekly		4. Bi-weekly epic report	
Quarter ends	6. Quarterly reports, retrospective & rebase	5. Quarterly epic report	
1-year, 3-year end	Retrospective		

1. Long-Term Roadmaps

- By Group Leaders
- At beginning of 3-year and 1-year periods



2023: Group Name 1-year Roadmap

Created by Renata McCoy
 Last updated: Feb 02, 2023 by Mark Petersen · 1 min read · 6 people viewed · Attachments

Tasks for Jan 2023-Dec 2023

Copy of the 3-year roadmap, refined and adjusted for this year epics

Major Goal	Epics	FTEs	Start Date	Due Date	notes	Retrospective
	V3 Coupled Model Support	0.5	Jan 2023	Dec 2023		
	Code maintenance and Simulation Campaign Support	0.5	Jan 2023	Dec 2025		
	COREv3 flux scheme and finish WW3 integration	0.25	Jan 2023	Dec 2023		
	WW3 Wave set up in three-dimensional ocean	0.75	Jan 2023	July 2023		
	WW3 Wave source term emulation	0.5	Jan 2023	Dec 2025		
	v3/v4 Manuscripts	0.5	Jan 2023	Dec 2025		
	Collaborate with OMEGAXx group on design of exascale model	1	Jan 2023	Dec 2025		
	OMEGA MPI and I/O framework	2.35	Jan 2023	Dec 2023		

2. Quarterly Roadmaps

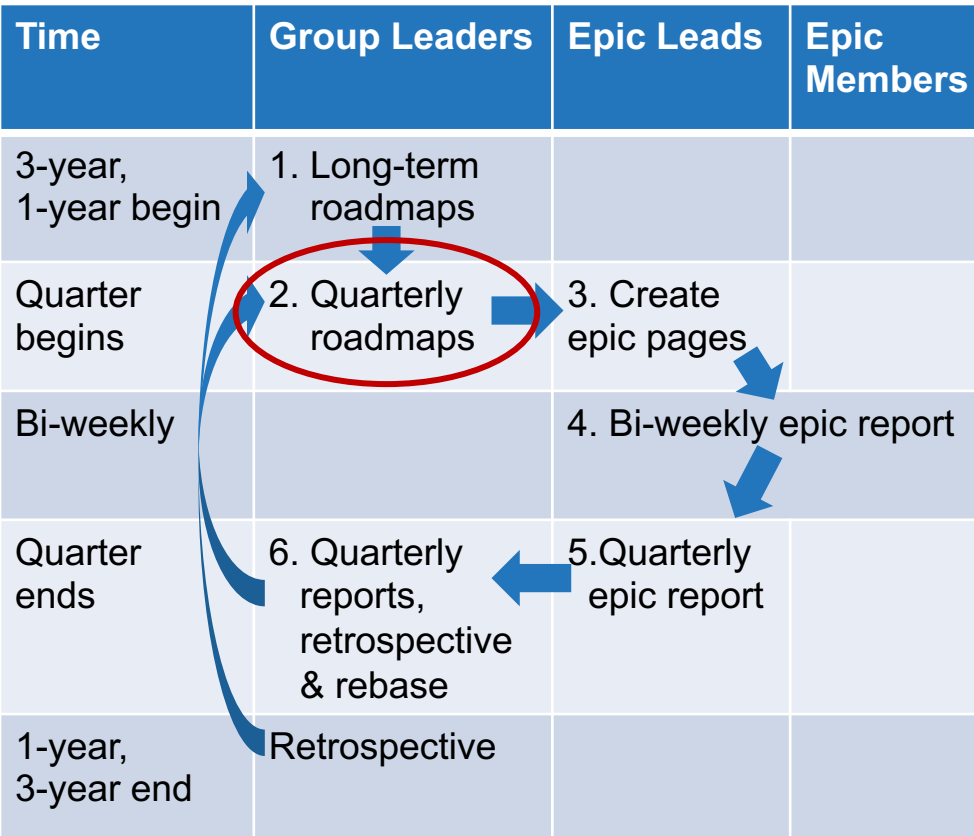
- By Group Leaders
- At beginning of every quarter

2023.Q1: GroupName Quarterly Roadmap (Jan 2023 - Mar 2023)

 Created by Renata McCoy
 Last updated: just a moment ago by Mark Petersen • 1 min read • 7 people viewed • Attachments

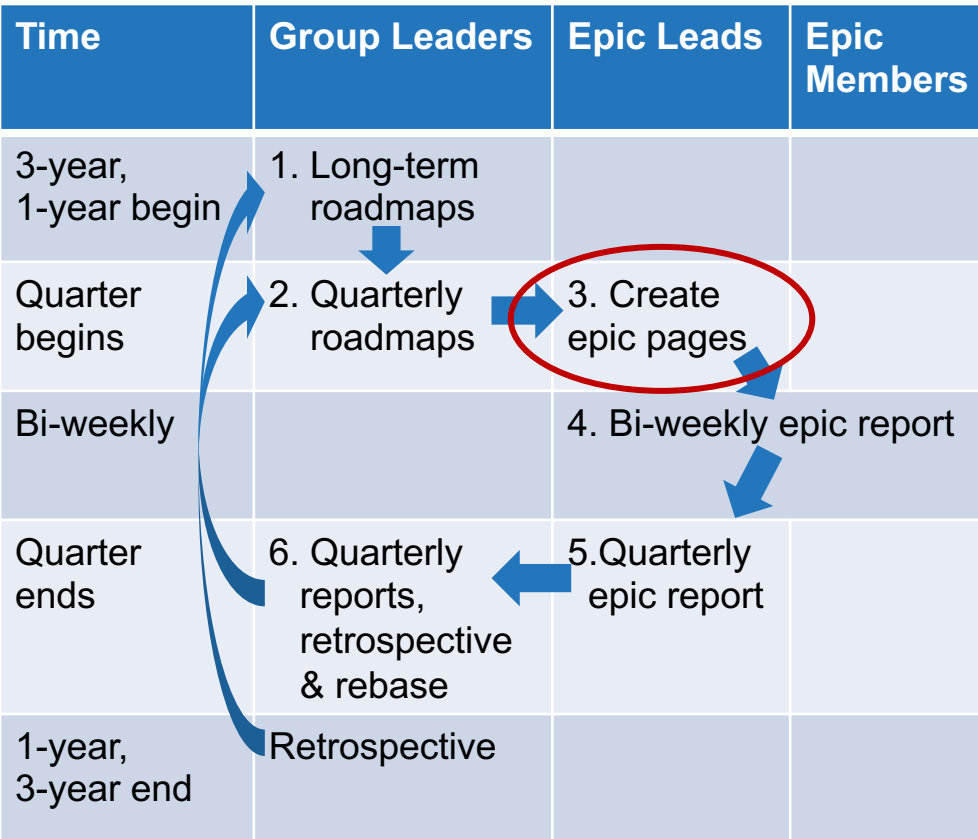
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Waves	WW3 Wave source term emulation	@Robert Jacob	0.5	2	
Publications	v3/v4 Manuscripts	@Wuyin Lin	0.5	2	
	Collaborate with CMESCA program analysis		1	1	

Time	Group Leaders	Epic Leads	Epic Members
3-year, 1-year begin	1. Long-term roadmaps		
Quarter begins	2. Quarterly roadmaps	3. Create epic pages	
Bi-weekly		4. Bi-weekly epic report	
Quarter ends	6. Quarterly reports, retrospective & rebase	5. Quarterly epic report	
1-year, 3-year end	Retrospective		



3. Create Epic Pages

- By Epic Leaders
- At beginning of every quarter
- Create from template in group for that quarter



Stacked Shallow Water Code (sample epic)

Created by Renata McCoy
Last updated: just a moment ago by Mark Petersen · 1 min read · 6 people viewed · Attachments

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Epic Team	@Renata McCoy @Mark Petersen
Group	GroupName
Tasks	1. c++ examples with YAKL for tendency term functions 2. convergence tests for spatial operators 3. Team reviews and approves standard format for arrays and loops
Expected FTE	1
Bi-Weekly Report 1	PROBLEM tested miniweather app on summit. Not compiling on Perlmutter. Seeking help with infrastructure team.
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Bi-Weekly Report 3	
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Bi-Weekly Report 5	
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Bi-Weekly Report 7	
Quarterly Report by Epic Lead	DONE 2D stacked shallow water equation solver is now working with YAKL. Not yet running with MPI. Convergence plots for s

3. Create Epic Pages

- At bottom of epic page, add all team member names as a label
- Labels will exist for everyone on E3SM
- Format is the same as @name but spaces to dashes

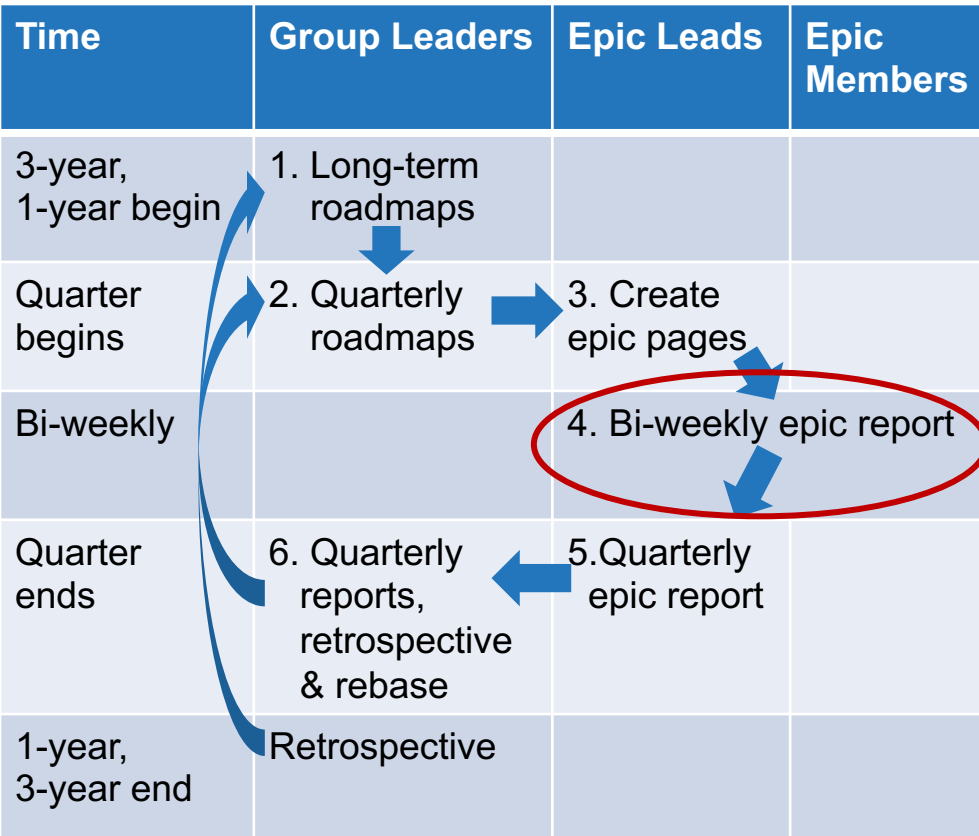
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1-year, 3-year end	Retrospective		

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2023-q1-epic x mark-|
mark-petersen
```


4. Bi-Weekly Epic Report

- Epic team members: white area at bottom of page
Could be organized in several ways:
 - A table for each task
 - A table for each person
 - One table for everyone

Time	Group Leaders	Epic Leads	Epic Members
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1-year, 3-year end	Retrospective		



Date	Report	Hours worked (optional)
Jan 13, 2023	<p>@Mark Petersen Added documentation to the code</p> <p>@Renata McCoy Ran tests on perlmutter and summit</p> <p>@Wuyin Lin No work to report this period</p>	

- Epic Lead: Blue summary at top.
 - Begins with status
 - This field is collected for summary pages

Bi-Weekly Report 1	PROBLEM tested miniweather app on summit. Not compiling on Perlmutter . Seeking help with infrastructure team.
Bi-Weekly Report 2	ON TRACK Altered miniweather app to solve 1D shallow water equations. Now compiled and tested on both summit and Perlmutter .

5. Quarterly Epic Report

- By Epic Leaders
- At end of every quarter
- Dark blue box on epic page
- Begins with status text

Time	Group Leaders	Epic Leads	Epic Members
3-year, 1-year begin	1. Long-term roadmaps		
Quarter begins	2. Quarterly roadmaps	3. Create epic pages	
Bi-weekly		4. Bi-weekly epic report	
Quarter ends	6. Quarterly reports, retrospective & rebase	5. Quarterly epic report	
1-year, 3-year end	Retrospective		

Quarterly Report by Epic Lead	DONE 2D stacked shallow water equation solver is now working with <u>YAKL</u> . Not yet running with <u>MPI</u> . Convergence plots for spatial operators are complete.
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6. Quarterly Retrospectives and Reports

- By Group Leaders
- At end of every quarter
- Group leaders read epic reports, write short status
- Quarterly group reports are similar to phase 2
- Retrospective is similar for end of 1 and 3-year periods

Time	Group Leaders	Epic Leads	Epic Members
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Quarter begins	2. Quarterly roadmaps	3. Create epic pages	
Bi-weekly		4. Bi-weekly epic report	
Quarter ends	6. Quarterly reports, retrospective & rebase	5. Quarterly epic report	
1-year, 3-year end	Retrospective		

2023.Q1: GroupName Quarterly Roadmap (Jan 2023 - Mar 2023)

Created by Renata McCoy
 Last updated: just a moment ago by Mark Petersen • 1 min read • 7 people viewed • Attachments

Major Goal	Epics	Epic Lead	FTEs	Priority (1 or 2)	Retrospective
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Auto-Generated Reports

- Collected from Epic Page blue table entries
- For bi-weekly and quarterly reports
- Organized by group and staff member
- Exists in each group's space, and in Roadmaps & Reporting Space

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E3SM-Phase3 Land

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 - 2023.Q1: Effort Reporting - Land

E3SM-Phase3 Land / ... / 2023.Q1: Land Group Epics & Reports

Jan 27, 2023

Title	Epic Lead	Bi-Weekly Report 2
Stacked Shallow Water Code (sample epic)	@Renata McCoy	ON TRACK Altered miniw... water equations. Now comp and Perlmutter.
Implement redox chemistry (sample epic)	@Renata McCoy	
Couple FATES multi-level canopy capability to ELM in SP mode (sample epic)	@Gautam Bisht	
Template Epic Page	@...	bi-weekly report for this per

Feb 10, 2023

Instructions

- Step-by-step reporting instructions are here: <https://acme-climate.atlassian.net/wiki/spaces/E3RR/pages/3661267008/Instructions>

Time	Group Leaders	Epic Leads	Epic Members
3-year, 1-year begin	1. Long-term roadmaps		
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E3SM-Phase 3 Roadmaps & Reporting

Pages

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- > Examples of Roadmaps and Epics

Epic Lead instructions for phase 3 reporting

Created by Mark Petersen
Last updated: Feb 03, 2023 · 3 min read · 6 people viewed · Attachments

On this page:

- Quarter begins: Epic Lead creates epic page
- Biweekly period ends: Fill out biweekly report
- Quarter ends: Complete epic page

Quarter begins: Epic Lead creates epic page

1. Look at the Quarterly Roadmap in your group's confluence space, here:

- ▼ Quarterly GroupName Roadmaps, Epics and Reporting
 - ▼ 2023.Q1: Quarter - GroupName (Jan 2023 - Mar 2023)
 - 2023.Q1: GroupName Quarterly Roadmap (Jan 202...

a. Find the epics where you are listed as an epic lead.
b. Check the expected FTEs, which is time the group leads expect is needed. Based team members.

2. Create an epic page by copying the template from here

- ▼ Quarterly GroupName Roadmaps, Epics and Reporting
 - ▼ 2023.Q1: Quarter - GroupName (Jan 2023 - Mar 2023)
 - 2023.Q1: GroupName Quarterly Roadmap (Jan 202...
 - 2023.Q1: List of Epics by E3SM ERR Staff Member
 - ▼ 2023.Q1: GroupName Quarterly Epics & Reports
 - Template Epic Page

then click three dots on upper right corner, Copy within the same parent page, and r the page name).

3. Fill in the Epic Page by adding: Epic Lead's name, the names of epic team members, FTE from the Quarterly Roadmap.

4. Epic Lead decides how the tasks will be reported on a biweekly basis. Example temp

