

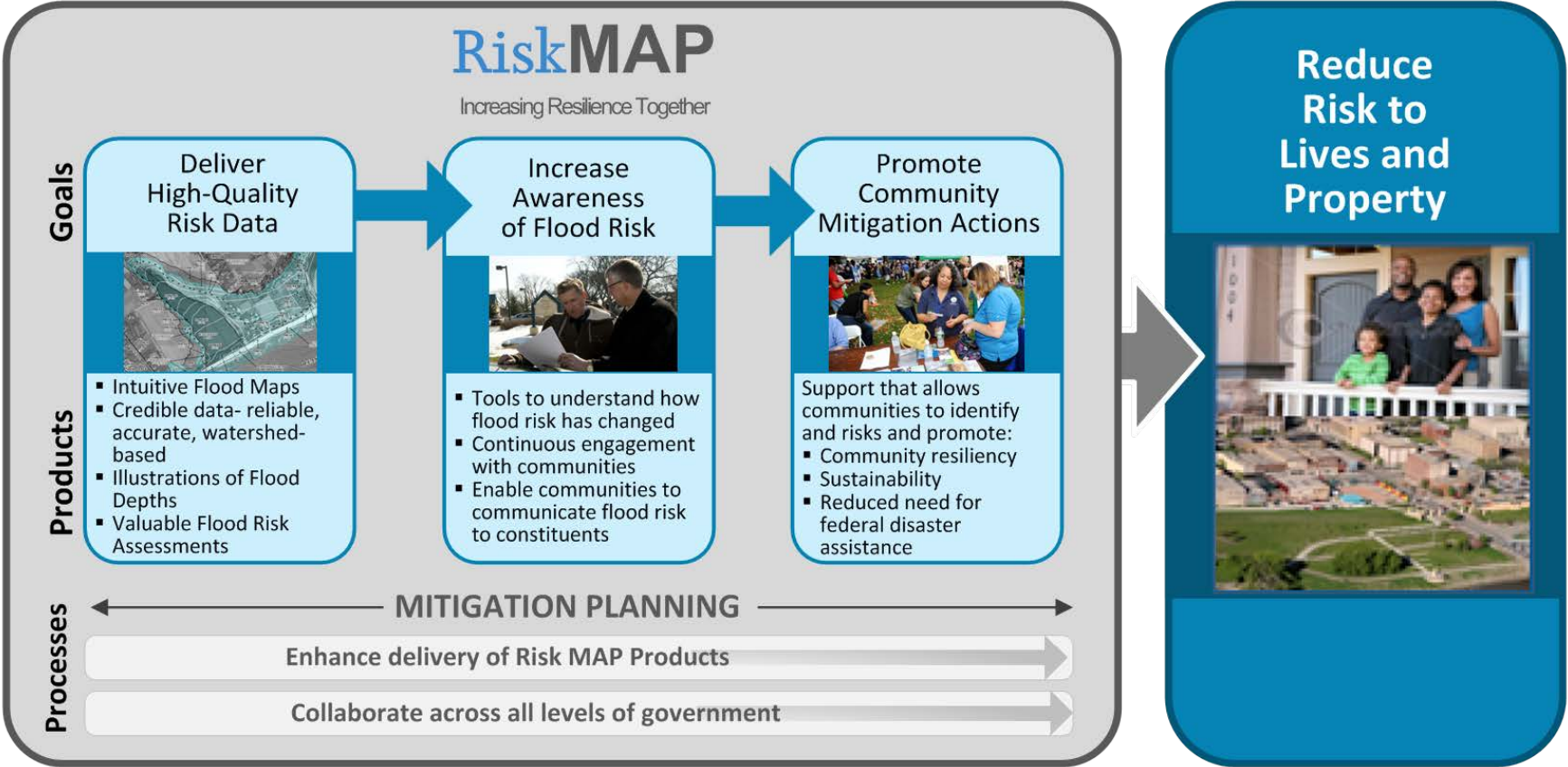
KENAI RIVER FLOOD STUDY

Flood Risk Review | March 21, 2022



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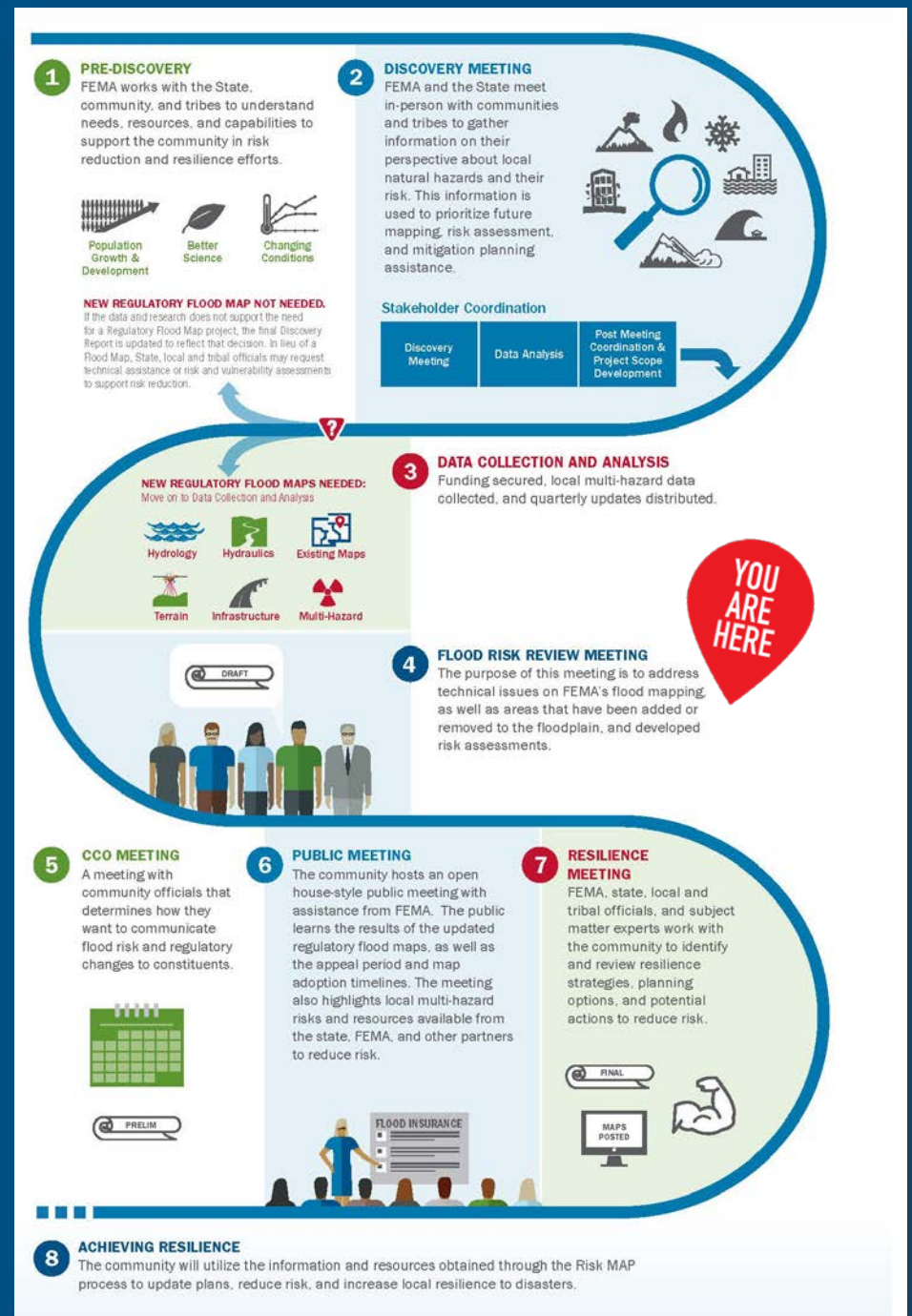
RiskMAP, The NFIP & Hazard Mitigation Planning



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Risk Mapping, Assessment & Planning (MAP)

- Risk MAP supports community resilience by:
 - Providing high-quality data
 - Building lasting partnerships
 - Supporting long-term hazard mitigation planning
- Outputs to Risk MAP may be:
 - Regulatory or Non-Regulatory
 - Flood-focused or Multi-Hazard focused



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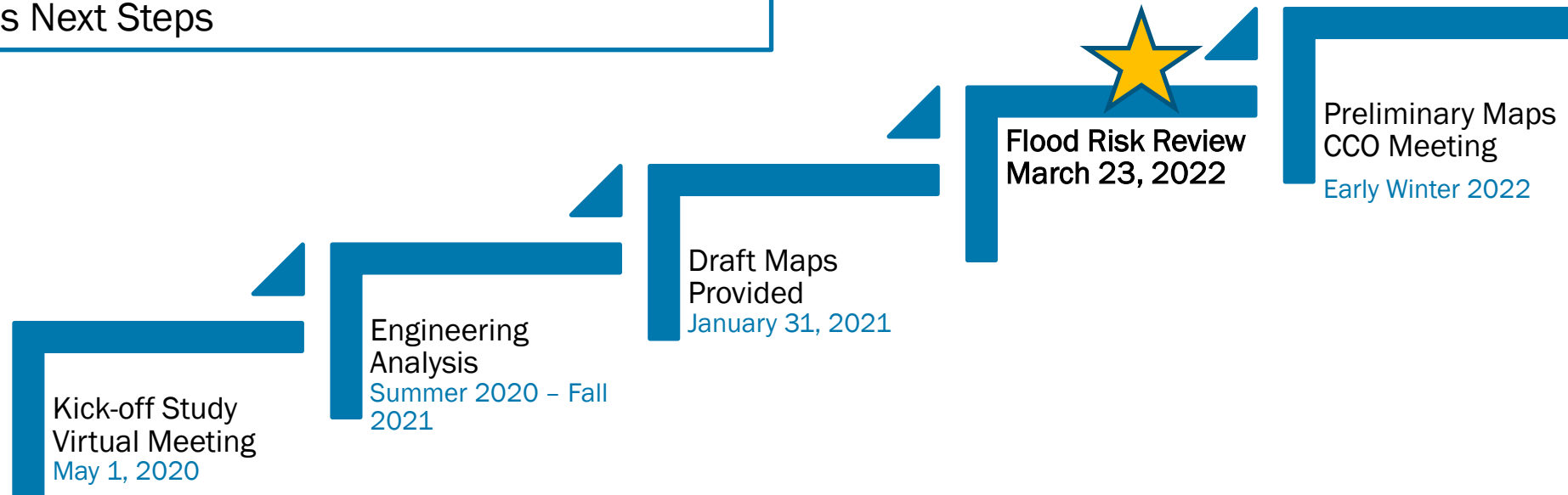
NFIP and the Kenai Peninsula Borough

- Kenai Peninsula Borough participates in the National Flood Insurance Program as well as the Community Rating System
- KPB floodplain maps are not all updated by this study:
 - 1981: Original FIS and mapping
 - 1999: First revision, Big Eddy area
 - 2016: Third revision, Coastal Hazard Analysis
- Purpose of the NFIP: reduce economic loss caused by flood events
- 257 NFIP policies
- \$73 million in property covered
- 75 paid losses (since 1978)
- \$600,000 paid (since 1978)
- CRS Class 9, 5% discount to all policyholders

Study Progress

Flood Risk Review Meeting Objectives

- Review methodology, analysis and draft maps
- Discuss Next Steps



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Key Responsibilities for NFIP-participating Communities

- Determine whether proposed development activities are in SFHAs
- Review development proposals to ensure compliance with requirements of floodplain management regulations
- Require new subdivisions and development proposals with more than 50 lots, or larger than 5 acres, to include BFEs
- Issue or deny permits for floodplain development
- Inspect all development in SFHAs to ensure compliance
- Maintain records of issued permits, elevation data, inspections and enforcement actions
- Assist in preparation and revision of floodplain maps
- Help residents obtain information on flood hazards, floodplain map data, and compliant construction measures



Scope of Work

USACE – Alaska District

- 1-D detailed analysis for 47 miles, outlet of Skilak Lake to mouth of Kenai River
- Multi-frequency analysis (10%, 25%, 50%, 1% and 0.2%)
- Water surface elevation and depth grids
- 1-ft increment inundation (for gages)

STARR II

- Floodway modeling and mapping



- ✓ National Weather Service developed calibrated model with 1995 and 2012 flood events.



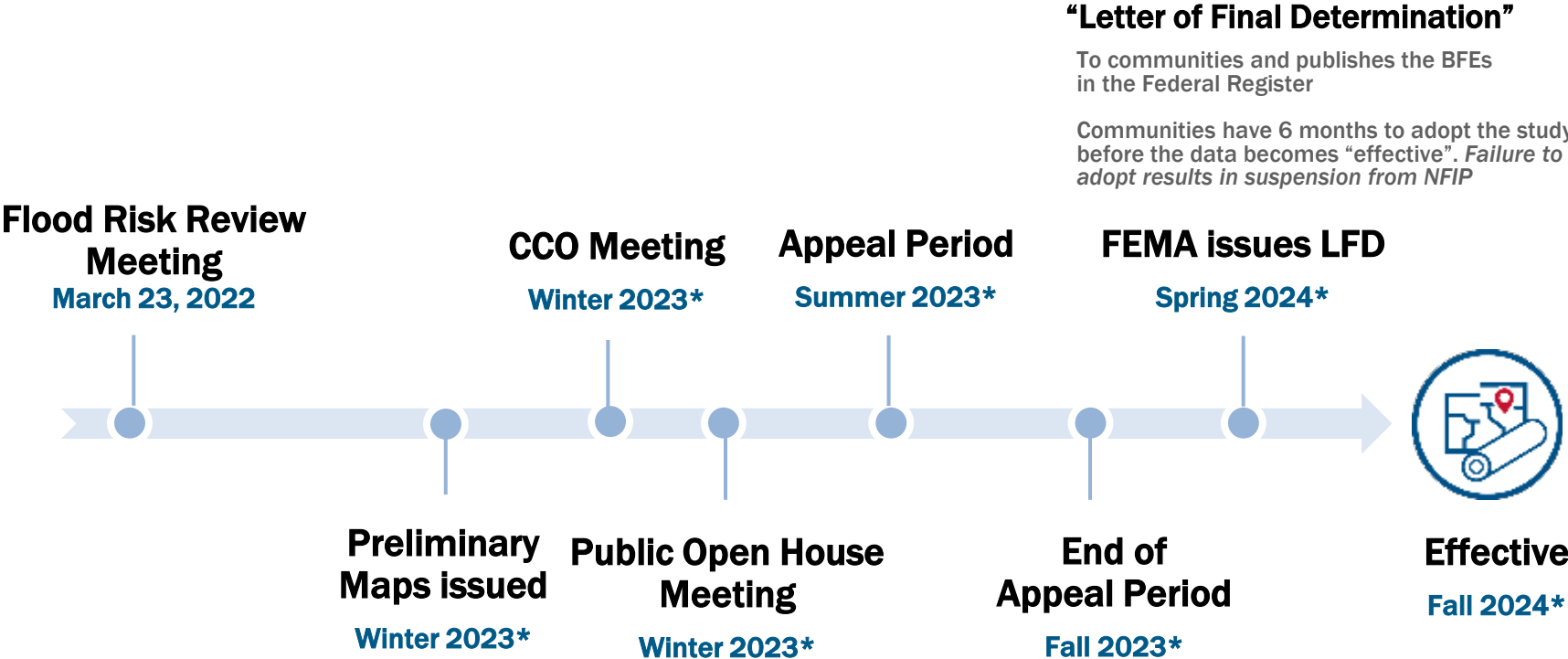
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Benefits and Uses of Completed Analysis

- Supplement regulatory products (FIRM/FIS)
- Best available information for BFE determinations for development and Letter of Map Amendments. Possibly Letters of Map Revision.
- Can be used for planning efforts – emergency, mitigation, preparedness, land use, and capital improvements
- Provide data to inform Hazard Mitigation Plans
- Models are intended to be upgradable or enhanced. No need to start from scratch.



Project Timelines Toward Map Adoption



“Letter of Final Determination”

To communities and publishes the BFEs in the Federal Register

Communities have 6 months to adopt the study before the data becomes “effective”. Failure to adopt results in suspension from NFIP



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* Dates estimated

Review Questions

- ❑ Are the new or revised floodplains consistent with your local knowledge of the flooding sources?
- ❑ Is water going somewhere it physically can not go?
- ❑ Are important map elements missing (roads, structures, bridges, culvert, etc.)?
- ❑ Are streams and significant features labeled correctly

Submit comments by March 31, 2022 to:

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