Appendix A – Flooding Maps

(Technical Report: Climate Projections and Scenario)

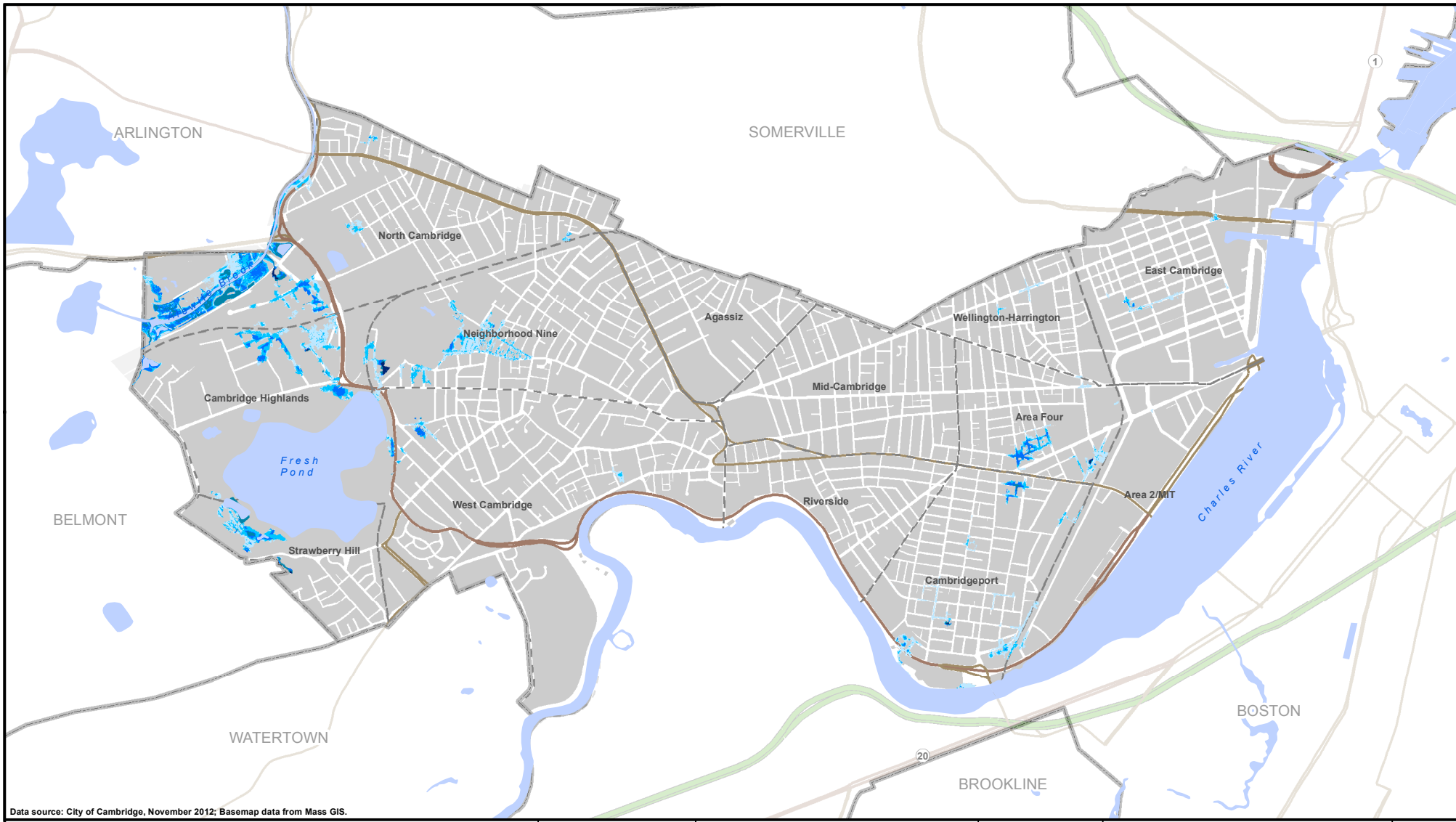
Updated April 2017

True to the City's commitment to issue updated information as new data or maps are available, the current updates are being posted to reflect revised flooding maps caused by extreme precipitation. The model for projecting flooding from extreme precipitation has been updated to integrate manhole and riverine flooding into one model[1], includes flows from tributary regions of Somerville, Belmont, Arlington and Malden River, extends downstream to the Amelia Earhart Dam, and reflects the recent reconstruction of the Cradock Bridge in Medford. The updated model is more reliable in depicting flooding risks.

CONTENTS

[1] The model was updated to integrate the Mystic River basin FEMA HEC-RAS riverine hydraulic model with the City of Cambridge combined sewer model in the Alewife Brook watershed.

Map 7: Present conditions precipitation flooding under the current 10-year 24-hour storm



LEGEND

Depth of flooding above ground (ft)
- 0 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- 2.0 - 3.0
- > 3.0

- Water Body
- City of Cambridge Boundary
- Neighborhood Boundary
- Interstate
- US Highway
- State Route

0 1,000 2,000
Feet
Locations are approximate

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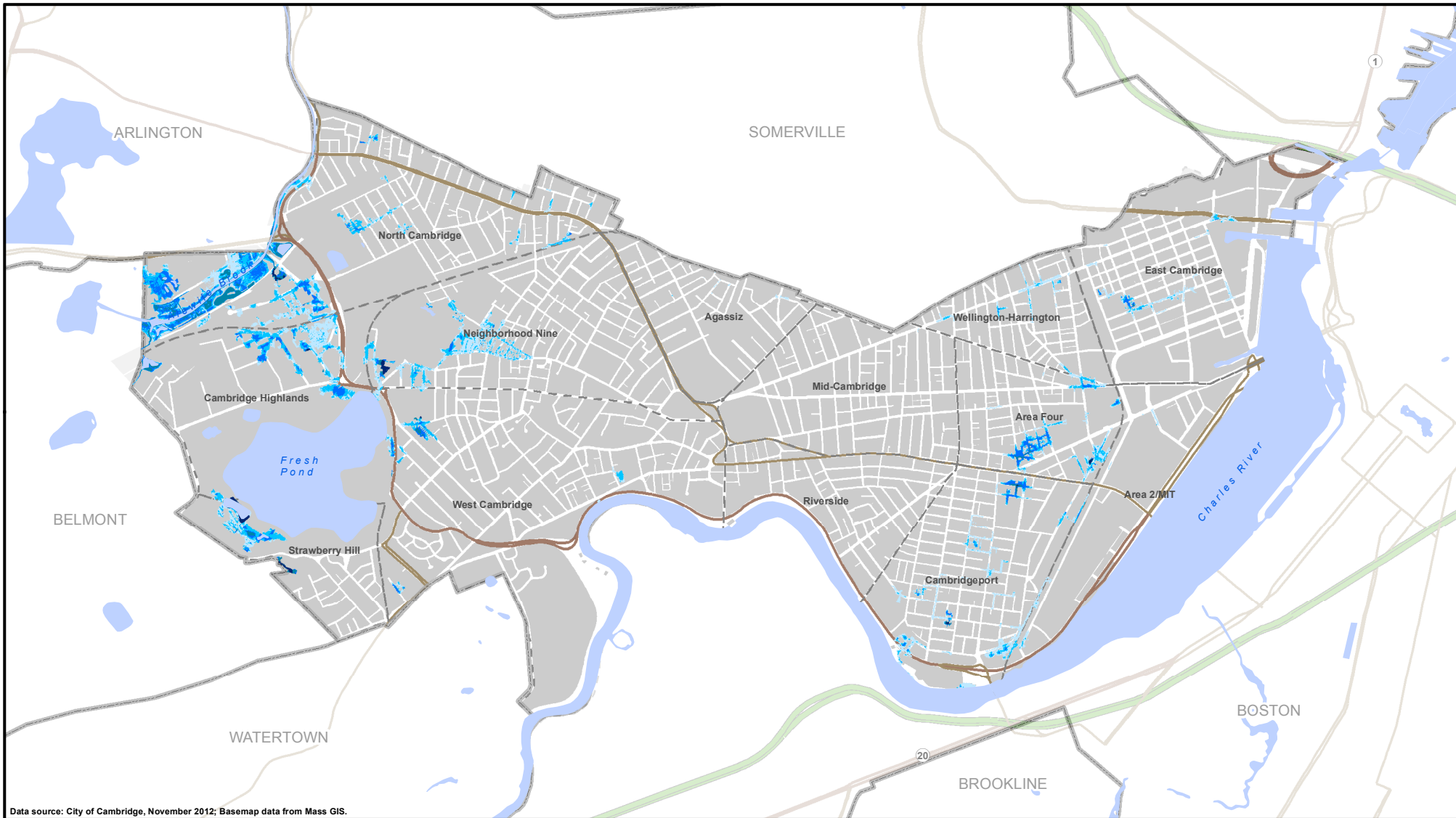
PRESENT CONDITIONS
10 YEAR SCENARIO
FLOODING FROM PRECIPITATION

Climate Change Vulnerability Assessment
Cambridge, Massachusetts

MAP
7

February 2017

Map 8: Precipitation flooding scenario under the 10-year 24-hour storm by 2030s



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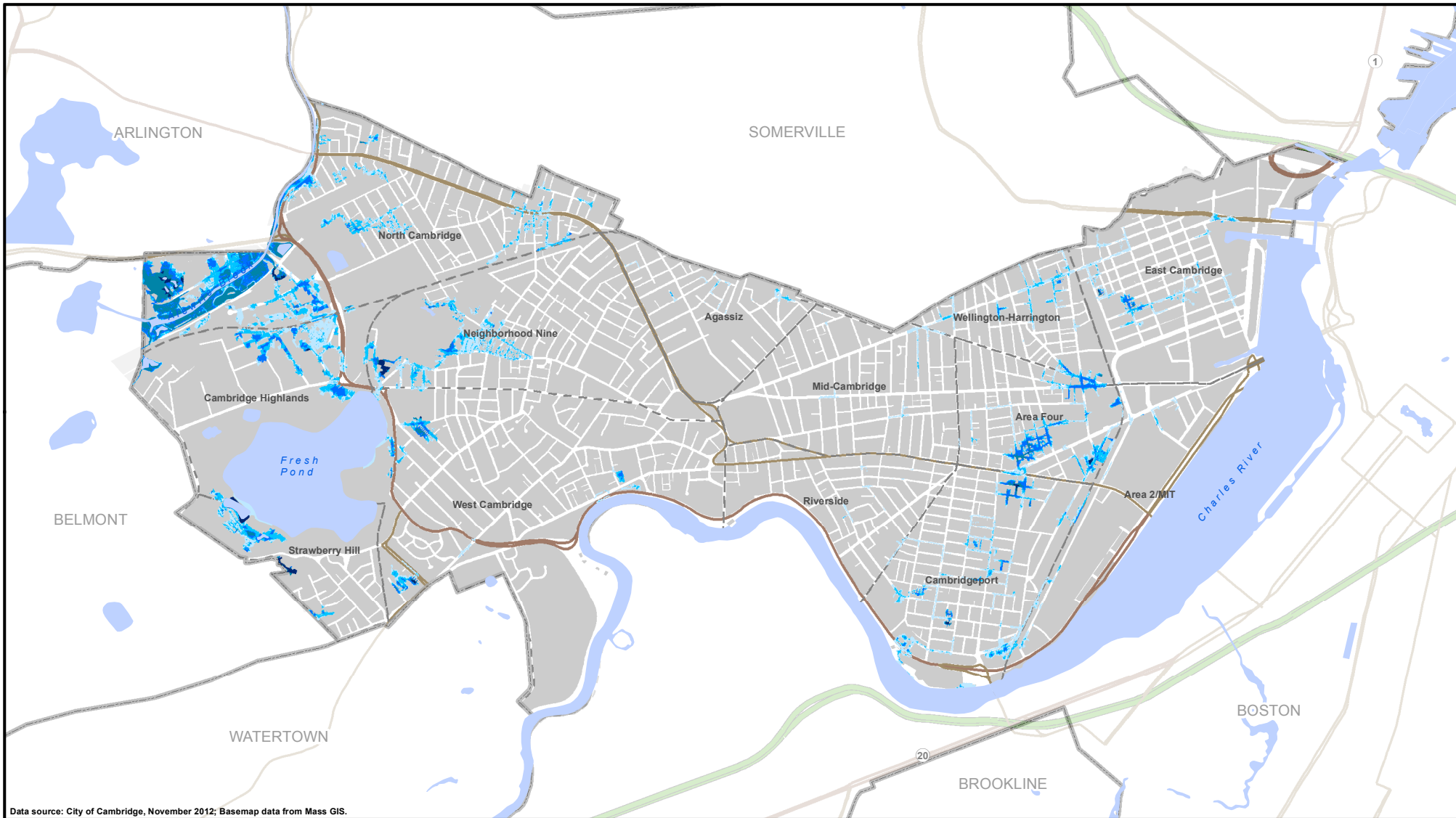
Map 9: Precipitation flooding scenario under the 10-year 24-hour storm by 2070s



LEGEND

Depth of flooding above ground (ft)

- 0 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- 2.0 - 3.0
- > 3.0

- Water Body
- City of Cambridge Boundary
- Neighborhood Boundary
- Interstate
- US Highway
- State Route

0 1,000 2,000
Feet
Locations are approximate

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2070 CONDITIONS
10 YEAR SCENARIO
FLOODING FROM PRECIPITATION

Climate Change Vulnerability Assessment
Cambridge, Massachusetts

MAP
9

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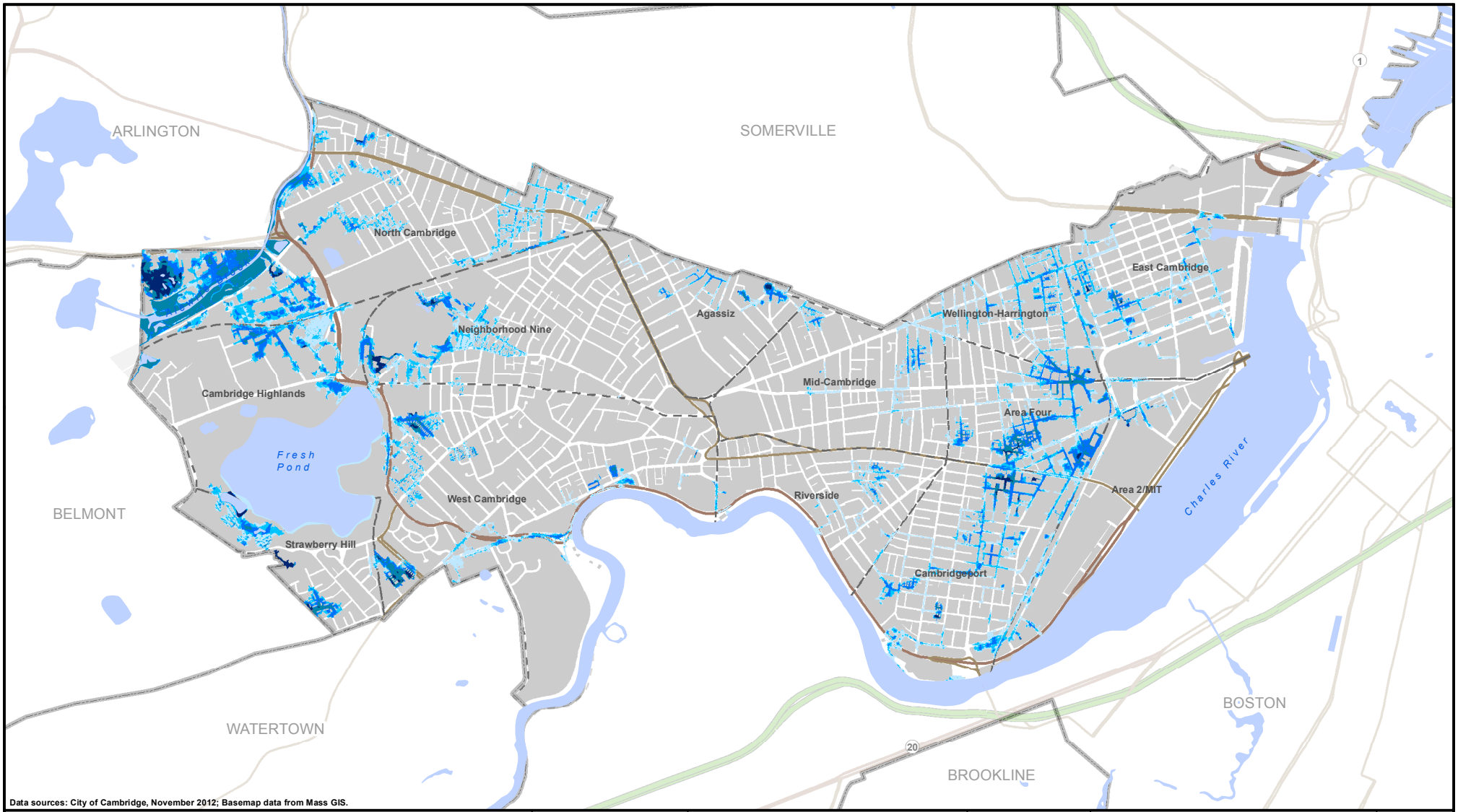
Map 10: Present conditions precipitation flooding under the current 100-year 24-hour storm



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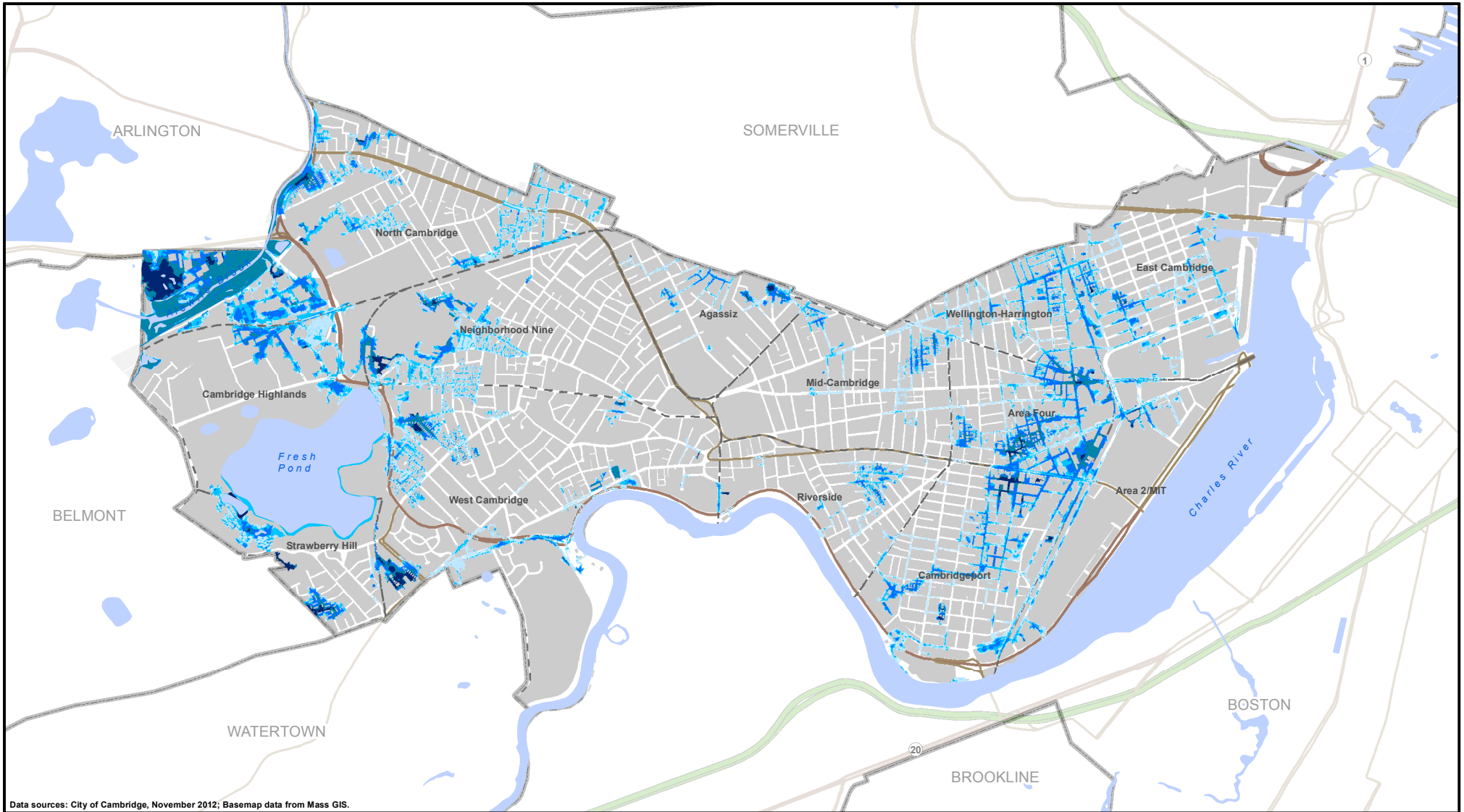
Map 11: Precipitation flooding scenario under the 100-year 24-hour storm by 2030s



LEGEND

Depth of flooding above ground (ft)

- 0 - 0.5
- 0.5 - 1.0
- 1.0 - 2.0
- 2.0 - 3.0
- > 3.0

- Water Body
- City of Cambridge Boundary
- Neighborhood Boundary
- Interstate
- US Highway
- State Route

0 1,000 2,000
Feet
Locations are approximate

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2030 CONDITIONS
100 YEAR SCENARIO
FLOODING FROM PRECIPITATION

Climate Change Vulnerability Assessment
Cambridge, Massachusetts

MAP
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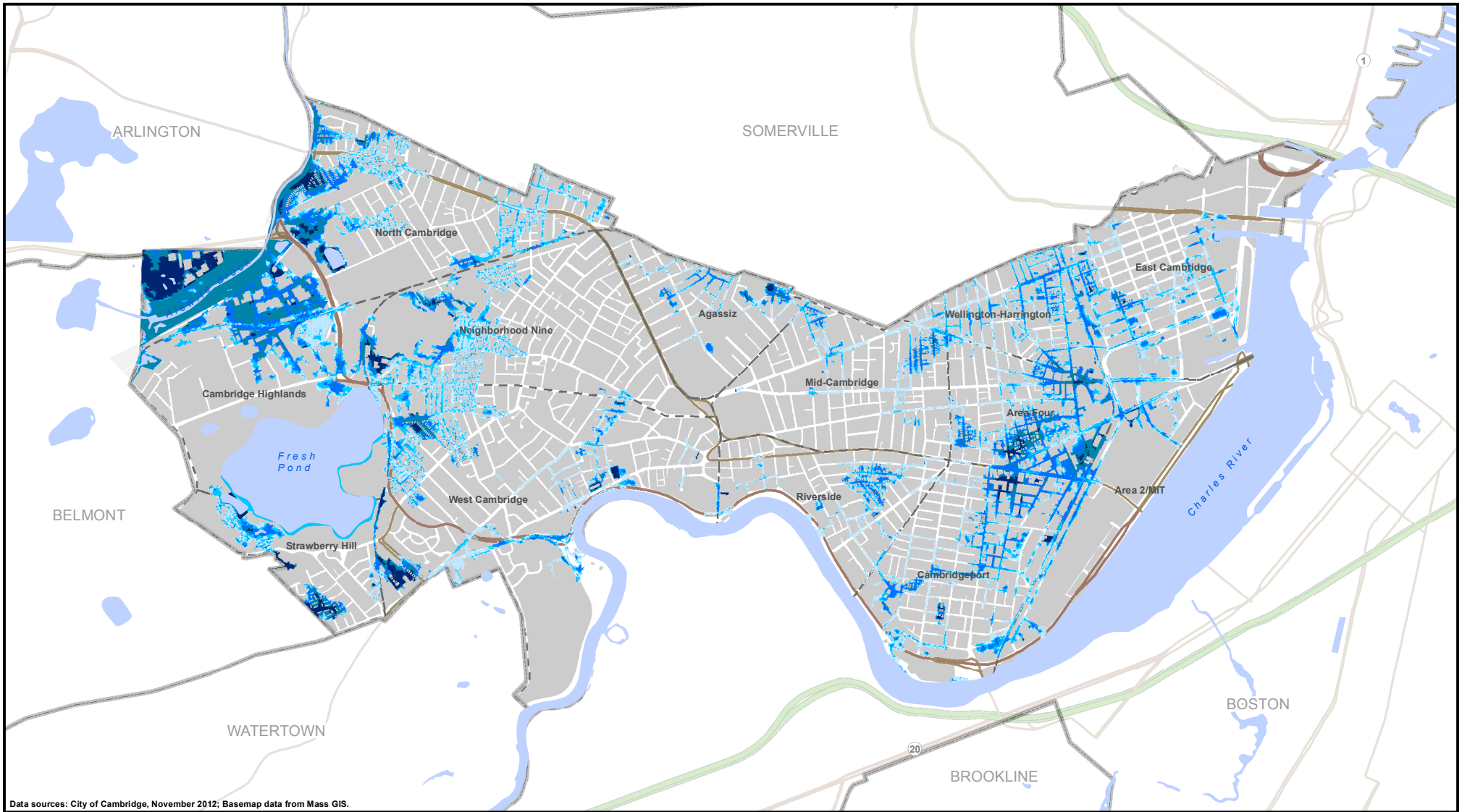
February 2017

Map 12: Precipitation flooding scenario under the 100-year 24-hour storm by 2070s



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