

BUILDING A WORLD OF DIFFERENCE

REVIEW OF THE JUNE 2012 FLOODING IN THE SOUTHERN MANHOOD PENINSULA

PUBLIC WORKSHOP 2

19 November 2012



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AGENDA

Introduction

Stakeholder engagement / data collection

Initial findings

- Model predictions**

- Completed Medmerry scheme**

- Medmerry temporary works**

- Channel vegetation and blockages**

Next steps

INTRODUCTION

FABIO SPALIVIERO

PROJECT DIRECTOR



PURPOSE OF REVIEW

To assess:

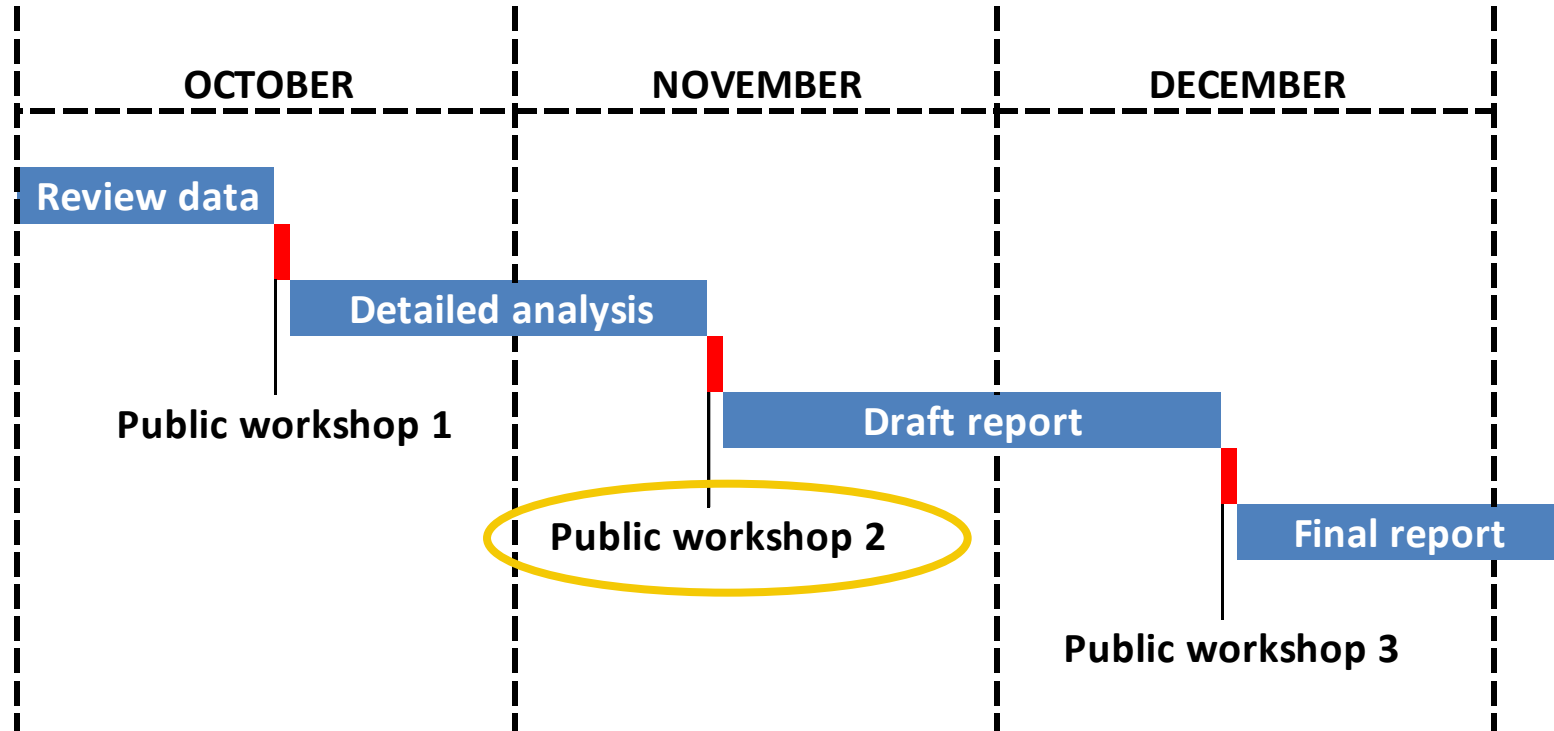
- Where and why flooding occurred in June 2012
- What factors could have caused the flooding
- Whether the Medmerry scheme was one of those factors

Independent and impartial analysis, based on evidence

PURPOSE OF THIS WORKSHOP

- To present our initial findings
- To get feedback on these findings
- To guide the focus of our Review Report

TIMESCALE



STAKEHOLDER ENGAGEMENT

VICKY LUTYENS

PRINCIPAL ENVIRONMENTAL SCIENTIST



STAKEHOLDER FEEDBACK

- 40 responses to request for info
 - Photographs
 - Written accounts – flood extent, duration and time
- Informed flood map and timeline
- Please send any further information ASAP
- Also feedback on stakeholder engagement
 - Public meeting time altered
 - More stakeholders on list - 70



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Engineering & Architecture
November 2012

Review of the June 2012 Flooding in the Southern Manhood Peninsula

What is the Environment Agency doing about current flooding concerns?

The Environment Agency's Asset Performance team recently met with residents in Alresington regarding a concern that cross-country paths would be cut off during flooding. The Environment Agency is looking to undertake a trial with the local authority.

Near Public Meeting, 19th November

We are currently undertaking detailed analysis of the flooding data we have received. We will be presenting our findings at the next public workshop on 19th November.

The reports will enable more people to attend, the meeting will be held in the evening. We are encouraging several more people to attend for the meeting. We will circulate the meeting invitation with the proposed venue and time of the next flow day.

DATA COLLECTION

DATA COLLECTION

- Rainfall and water level records
- Survey data (LiDAR, outfalls)
- Medmerry scheme design drawings
- Final scheme concept design report
- Contractor's construction method statement
- Photographs taken during the flood
- Diaries / reports on flood from those on site (Environment Agency, TVO - contractor, Jacobs - designer)
- Correspondence between residents and Environment Agency after flood event

TYPES OF INFORMATION USED

- Recorded data – rainfall measurements, survey, time stamped photos
- Observations – eye-witness accounts (written and verbal)
- Modelling – using established software to compare ‘what-if’ scenarios (modelling results are predictions)

TIMELINE OF JUNE FLOOD

Sun 10th / Mon 11th overnight	Intense rainfall
Mon 11th from 8am	Properties start to flood (Almodington, Birdham, Somerley)
Mon 11th through day	Flood levels steadily increase and more properties flood (Bookers Lane and Earnley village), peaking in the evening
Tues 12th early in morning	People rescued from Bracklesham Bay Caravan Park, flooding at Sussex Beach Holiday Village
Tues 12th at 10am	A breach is made in Medmerry embankment on Earnley Rife by contractor
Tues 12th through day	Water levels generally reported to be dropping slowly, some properties no longer flooded
Tues 12th at 3:30pm	A farm culvert near Marsh Barn on Grange Rife removed by contractor
Wed 13th morning	Environment Agency deployed pump at Bracklesham Bay Caravan Park and ordered additional pumps
Wed 13th at midday	Debris is cleared from Medmerry outfall
Wed 13th in afternoon	There is a rapid drop in water levels reported at many of the remaining flooded properties. Levels begin to drop at Bracklesham Bay Caravan Park.
Thurs 14th at midday	Additional pumps are deployed by Environment Agency and contractor to help drain the catchment
Fri 15th	Additional pumps deployed by Environment Agency
Fri 15th midday	Water almost fully drained away at Bracklesham Bay Caravan Park

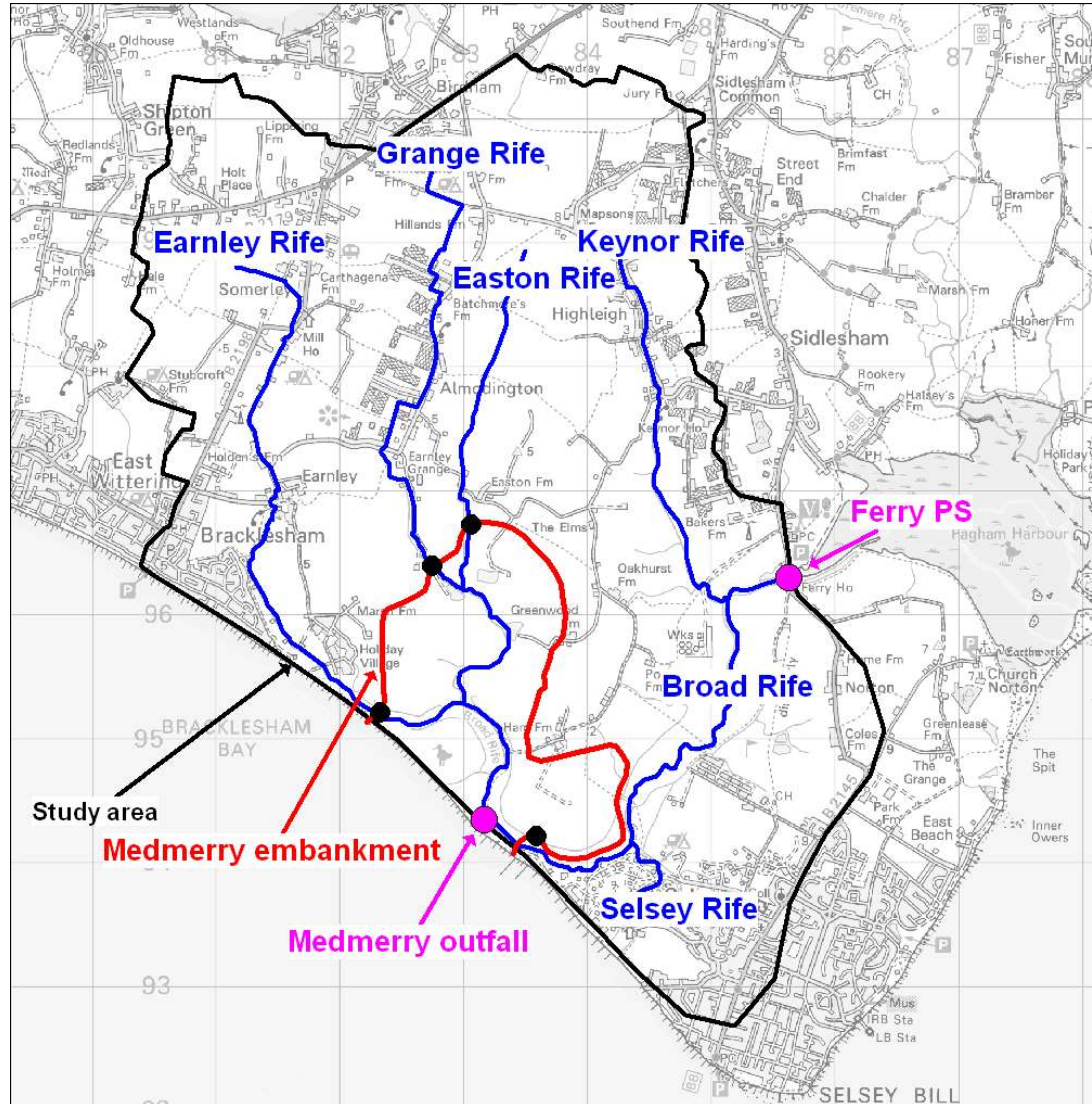
INITIAL FINDINGS

ROB FRASER

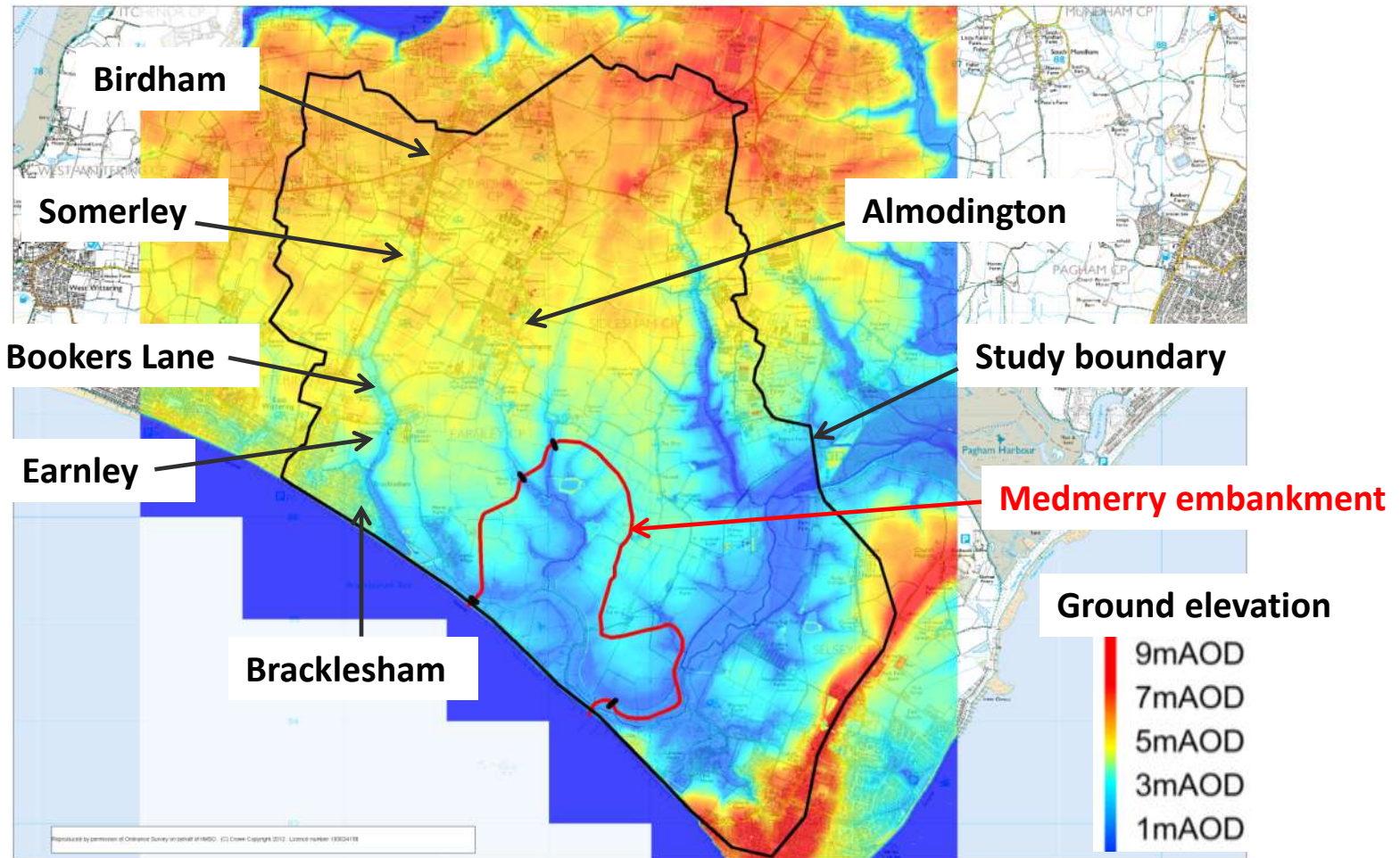
PROJECT MANAGER



BACKGROUND – STUDY AREA

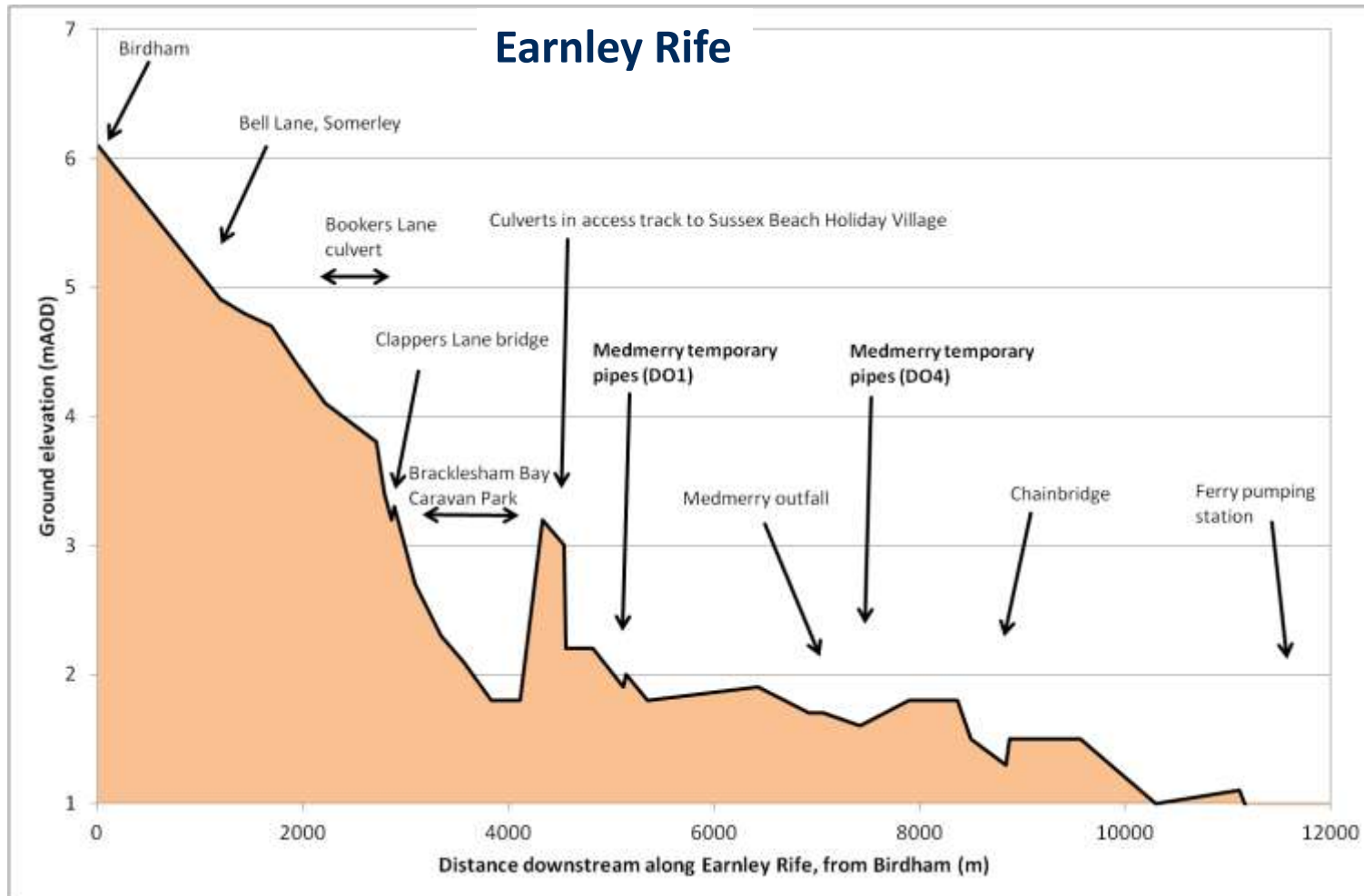


BACKGROUND – GROUND LEVELS (1)



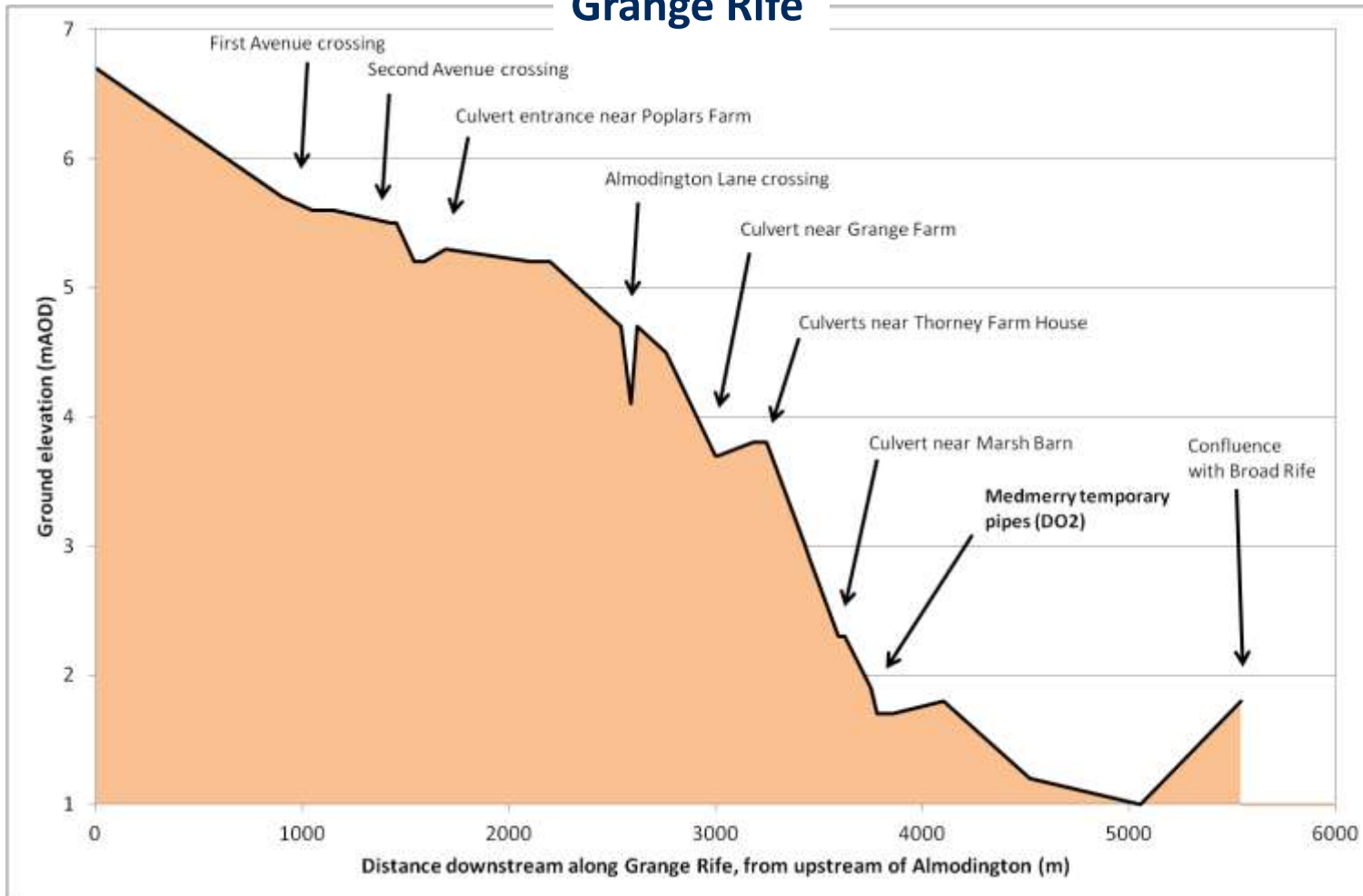
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BACKGROUND – GROUND LEVELS (2)



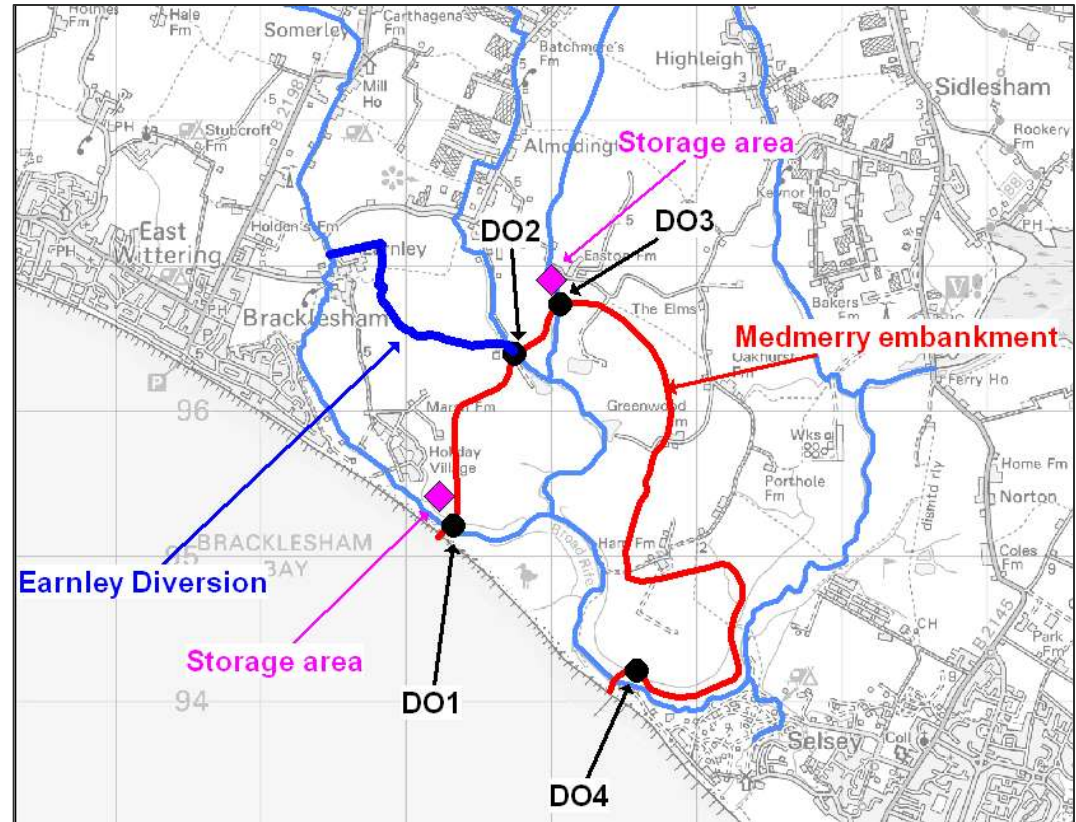
BACKGROUND – GROUND LEVELS (3)

Grange Rife



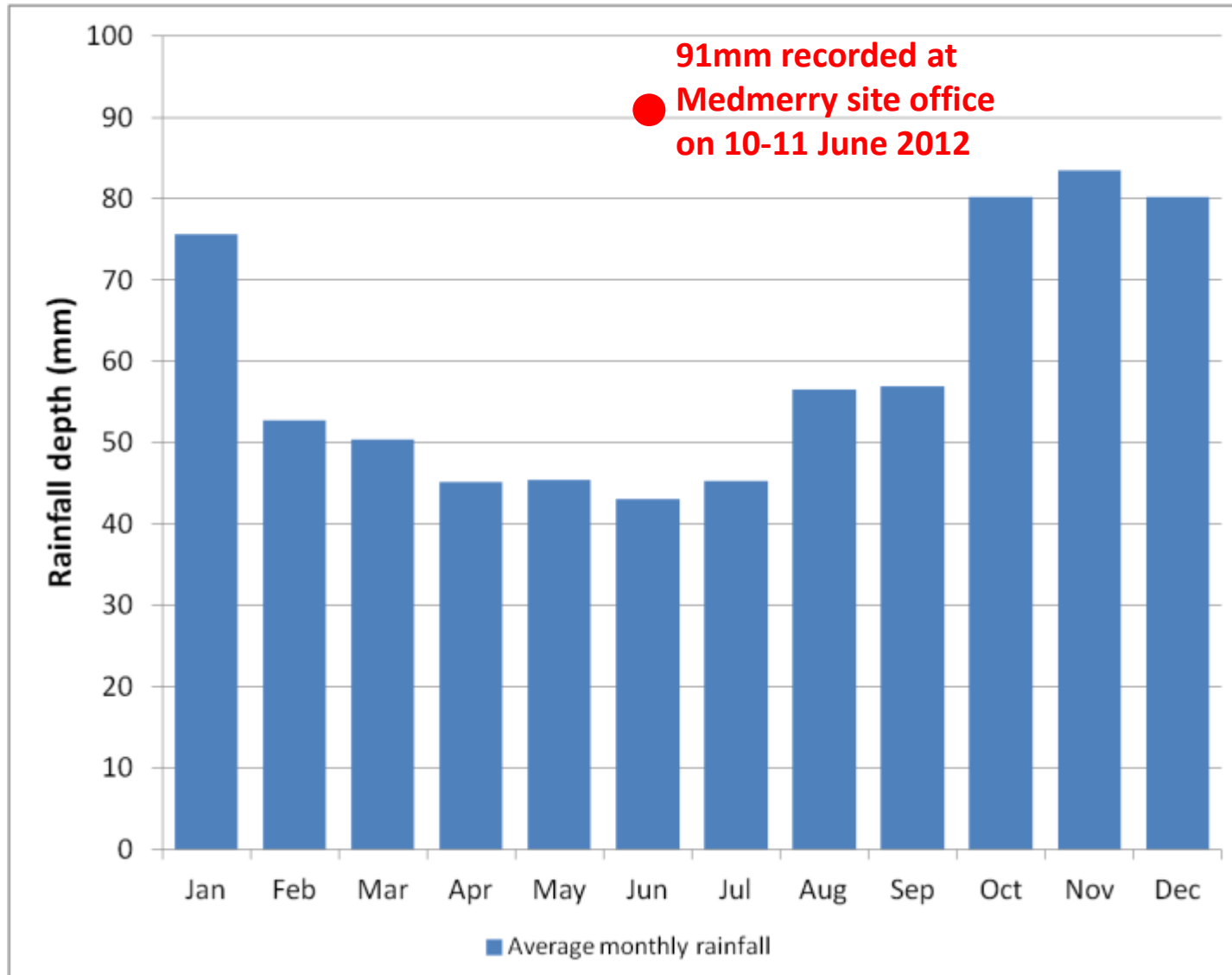
MEDMERRY MANAGED REALIGNMENT SCHEME – LAND DRAINAGE ASPECTS

- Four drainage outfalls
- Upstream storage on Earnley and Easton Rifes
- Earnley Diversion Channel
- Perimeter ditch

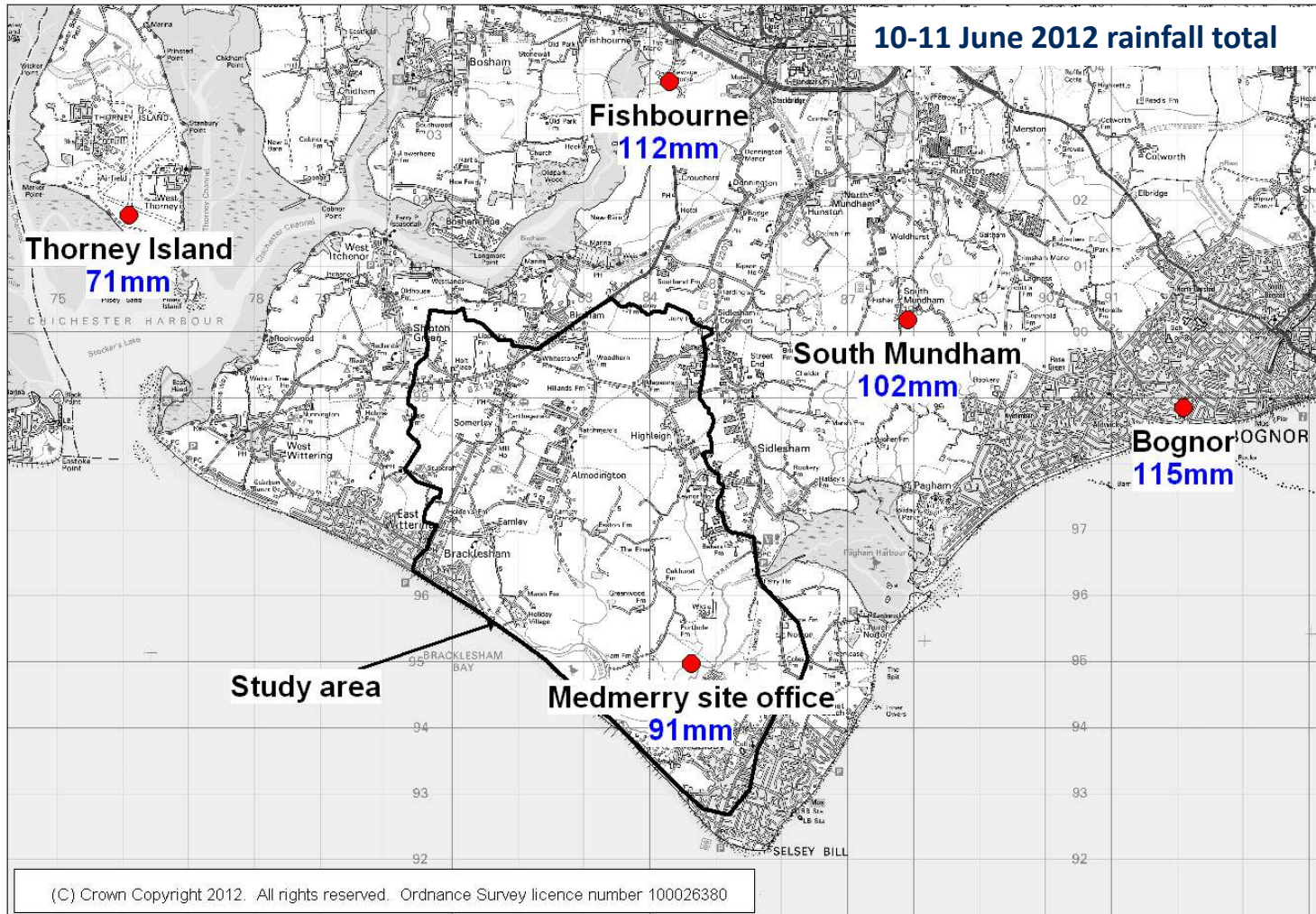


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AVERAGE MONTHLY RAINFALL

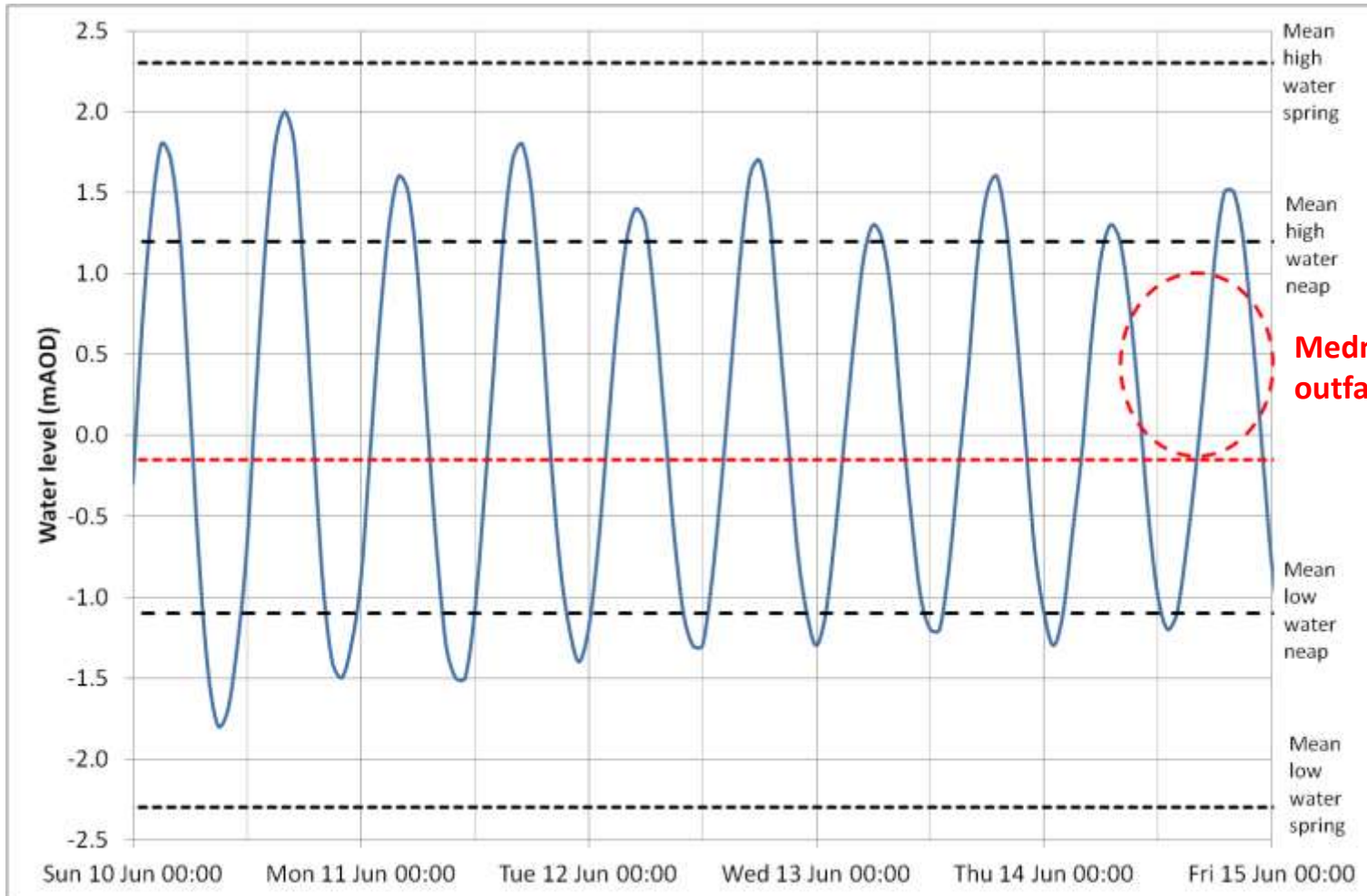


RAINFALL ON 10-11 JUNE 2012



Exceptional rainfall – highest on record

TIDE LEVELS 10-15 JUNE



Medmerry outfall

DISCUSSION

