

Report to: Cabinet



Date of Meeting 28th October 2020

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Exemption applied: None

Review date for release N/A

Exmouth Tidal Defence Scheme Flood Gate Operations

Report summary:

To supersede item 4.3 of cabinet report of Wednesday, 9 November 2016; 5.30pm to permit East Devon District Council to operate the highways flood gates, and sign up to a 3 party agreement to allow community volunteers to close non highways flood gates.

Recommendation:

That Cabinet;

1. **Agree to permit East Devon District Council to be the primary responder to operating the highway flood gates in Exmouth.**
2. **Agree for East Devon District to sign up to the 3 party Memorandum of Understanding between East Devon District Council, Environment Agency and Exmouth Town Council to allow community volunteers to be the primary responder for operating non highway flood gates, with delegated authority given to the Strategic Lead (Housing, Health and Environment) to complete the agreement in consultation with the Strategic Lead (Governance and Licensing).**

Reason for recommendation:

1. East Devon District Council are geographically well placed to respond quickly to both closing and opening of gates, minimising inconvenience for Exmouth.
2. Having the community close non-highway gates will give a sense of community ownership, build community spirit and reduce inconvenience to Exmouth as well as limiting operating cost increases where we already have difficult budget decisions to make

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Portfolio(s) (check which apply):

- Climate Action
- Corporate Services and COVID-19 Response and Recovery
- Democracy and Transparency
- Economy and Assets
- Coast, Country and Environment
- Finance

- Strategic Planning
- Sustainable Homes and Communities

Financial implications:

The financial implications are detailed in the report. If approved there will be minor staff costs in the current financial year which can be accommodated within existing budgets with the full costs then incorporated into the 2021/22 budget proposals.

Legal implications:

It is within the power of the Council to agree to what is proposed and to enter into an agreement to formalise the arrangements. Otherwise there are no legal implications requiring comment.

Equalities impact Low Impact

Climate change Low Impact

Risk: High Risk; Risk of not entering agreement to close highway gates could result in Exmouth flooding during a storm. Although no financial liability of non-gate operation would be incurred, the reputation of the council would be damaged if properties were flooded.

Links to background information [Cabinet - 9th November 2016 – Agenda Item 14 - Page 61](#)

Link to [Council Plan](#):

Priorities (check which apply)

- Outstanding Place and Environment
- Outstanding Homes and Communities
- Outstanding Economic Growth, Productivity, and Prosperity
- Outstanding Council and Council Services

Report in full

1. Introduction

- 1.1 This report follows on from Agenda Item 14 of Cabinet of Wednesday, 9 November 2016; 5.30pm.

Section 4.3 states; it is not proposed at this stage that EDDC operate the new flood gates. Where possible flood gates will normally be closed, or alternatively operated by flood groups or residents. Flood gates along the Esplanade will require traffic management, and the operation of those will continue to be discussed with the EA to ensure an appropriate resource is put in place.

- 1.2 However in consultation with the Environment Agency, it is sensible for East Devon District Council to be the primary operator of the highways gates, and a Community Group operating under Exmouth Town Council, will be the primary operators of non-highways gates. It is a requirement that when working on the highway, operators are covered by specialist training known as "chapter 8" which our Street scene operatives are. Devon County Council have also indicated this will be a requirement in order to delegate to us the ability to close the road.

1.3 The scheme design has evolved since it was conceived. It now features multiple flood gates that require operating prior and after a storm event. These gates are summarised below.

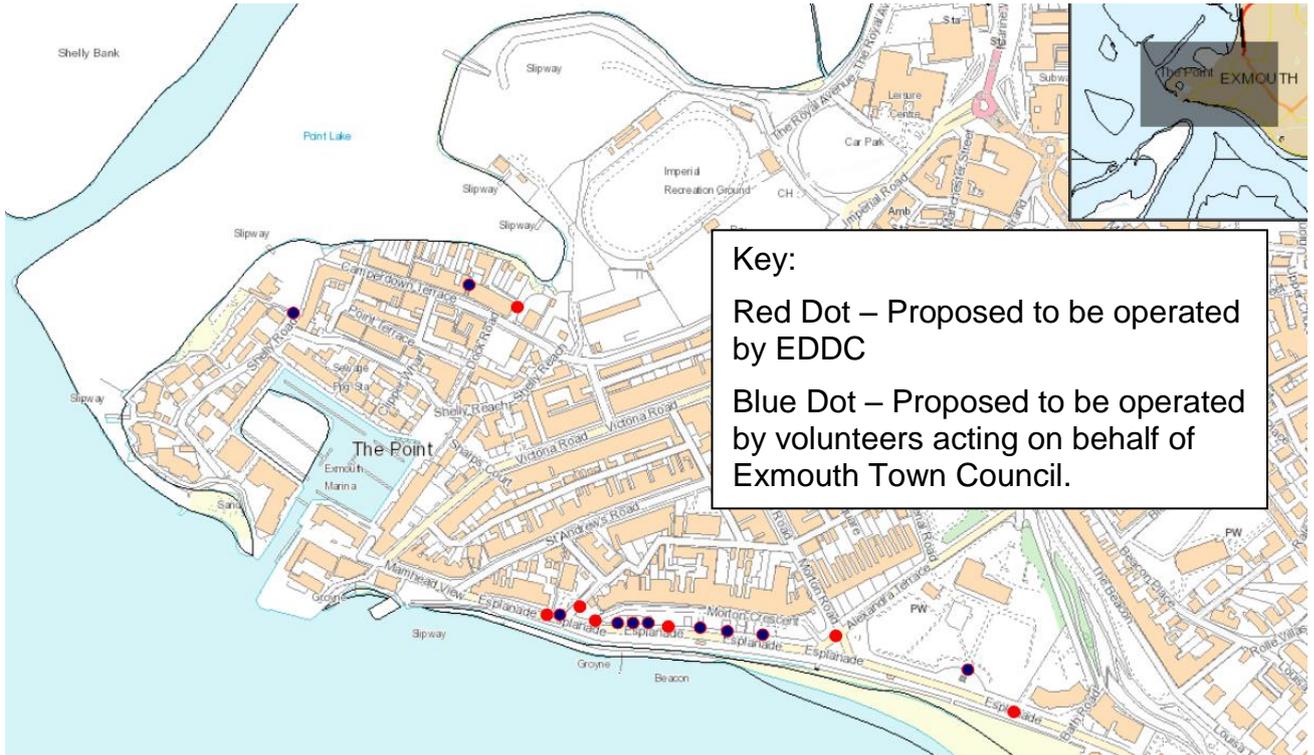


Image 1: Flood gate locations in Exmouth. Note: multiple gates may be located at each dot.

1.4 The flood gates are essential, and if they are not operated, up to 1500 residential properties plus numerous commercial properties will remain at flood risk during a storm event.

2. Proposed Highway Gate operation.

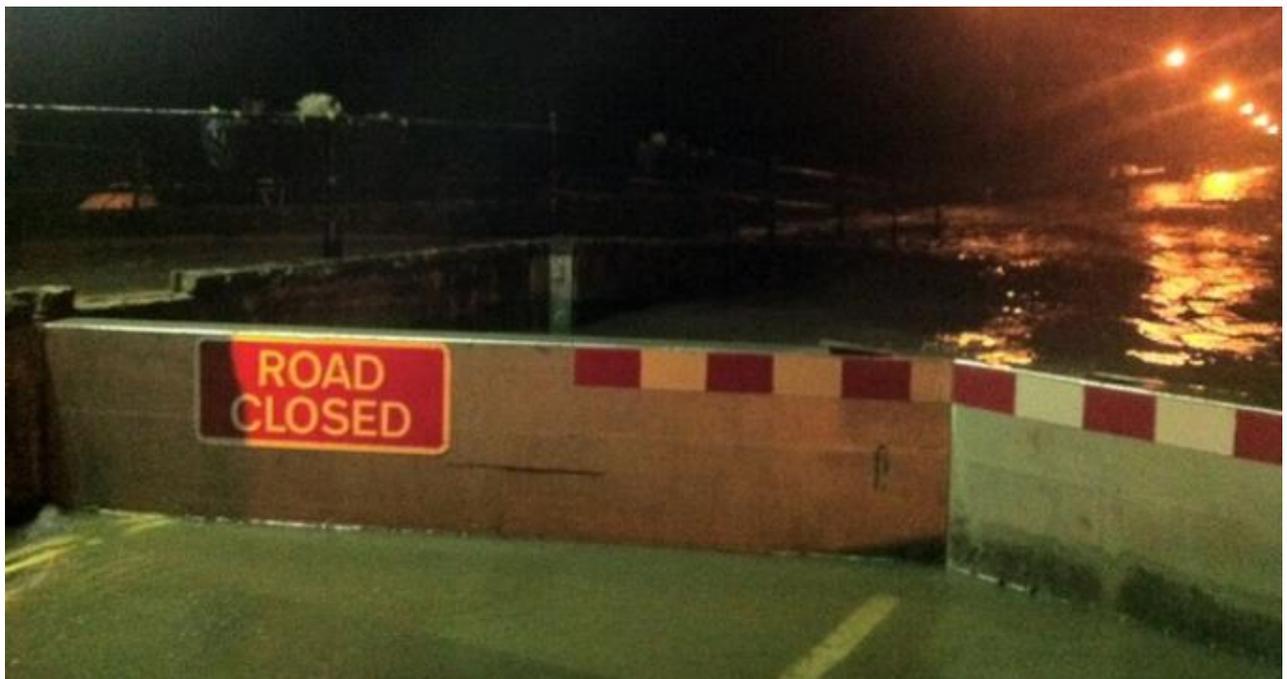


Image 2: Highway flood gate located in Instow, North Devon – Picture ITV Westcountry

- 2.1 There are 3 main routes into the impounding area created by the new tidal defence scheme.
- Western Route, via the Esplanade, with gates adjacent to The Grove
Central Route, via Alexander Terrace, with gates opposite Morton Road
Eastern Route, via the Esplanade, with gates adjacent to the Premier Inn
- 2.2 East Devon District Council would receive a warning from the Environment Agency at least 6 hours before gate closures would be required.
- 2.3 With co-operation from Devon County Council, who manage the on-street parking on the Seafront, parking would be suspended by ticket machines no longer issuing tickets, and remaining tickets timing out.
- 2.4 Meanwhile East Devon District Council would go about closing the Central and Eastern access route gates. This would be inclusive of diversion signage, indicating the only egress out is via the Western Route. The Western route is the last gate to be closed, as it has the highest threshold.
- 2.5 Once the Central and Eastern route gates have been closed, East Devon District Council will staff the Western route gates, only allowing vehicles out of the impounding area.
- 2.6 Once all vehicles have been removed, the Western Route Gates would be closed.
- 2.7 East Devon District Council will visit all the other non-highways gates to check they have been closed properly. East Devon will also close the gateway at Camperdown creek, as well as vehicle gates to Morton Crescent. These gates do not shut the highway, but do restrict vehicle movement
- 2.8 Should the impounding area have remaining vehicles in it after their parking tickets expire, then East Devon District Council will staff the Western Route Gates until just before the storm arrives, closing them before they leave.
- 2.9 Once the storm, or series of storms has passed, the Environment Agency will send a message to indicate the gates can be opened. East Devon District Council will then open the gates at the earliest opportunity.
- 3. Proposed Non-Highway gate operation.**
- 3.1 The below method is our suggested operational procedure following guidance from the Environment Agency. The local community group may wish to amend the procedure to make it work better for them.
- 3.2 Due to both the geographical distance, and the different gate closure trigger points, it is envisaged there will be two separate community volunteer groups, one based at the Camperdown area, and another based at the Sea Front. These will be made up of local people, ideally with at least 10 members at each location.
- 3.3 The Environment Agency will send a message to all members of both groups to say the flood gates will need closing, at least 6 hours in advance.

- 3.4 Both groups will muster at a predesignated muster point. Depending on how many people attend, they will split off to close the gates. Once all their gates are closed, they will report back to the Environment Agency.
- 3.5 Once the storm or set of storms has passed, the Environment Agency will send a message to all members of both groups who will muster, and open the gates.
- 3.6 Should the gates not be able to be closed by the local community group, the closure requirement will be escalated to other bodies (East Devon District Council, Environment Agency, Fire Service etc). However this method has been found to work very well in other locations such as Lympstone.

4. Benefits for East Devon District Council to Operate the Highways Gates.

- 4.1 East Devon District Council are geographically well placed to respond to close the gates, as the team best suited to close the gates are based at the Camperdown Depot within Exmouth.
- 4.2 With a team being based very local to the gates, this will minimise lead time, so gates could be shut later before an event, and opened quicker following an event. This would minimise inconvenience for residents of Exmouth limiting closure periods.
- 4.3 If the Environment Agency were to lead on gate closures, they would have a minimum half hour travel time to Exmouth. They also have close many other flood gates around the County. Depending on the event and other requirements they may need to close the gates earlier, and open much later, which would inconvenience the residents of Exmouth for a longer period of time.

5. Benefits for East Devon District Council to be included in the 3 party Memorandum of Understanding to set up the community gate group.

- 5.1 Although the Environment Agency will lead on setting up and maintaining the community group, it will need to involve East Devon District to ensure it is a success.
- 5.2 Having the gates being closed by the community, gives community ownership and also reduces the operating cost increases for East Devon District Council at a time where we already have a budget shortfall and careful funding choices to make.
- 5.3 Community closed gates can give a sense of local ownership, empowerment and social cohesion. Community volunteers will develop skills and social infrastructure that they may also contribute to Exmouth Town Council's Community Emergency Plan.
- 5.4 Community closed gates can offer more flexibility to local residents for gates to be opened between tides, and also sooner once the all clear is given, reducing inconvenience to the residents of Exmouth. Community volunteers' local knowledge will ensure that the defence will operate in a way that is considerate and responsive to local needs.

6. Financial cost to East Devon District Council.

- 6.1 East Devon District Council have already agreed to a contribution in kind in the region of £900k towards the flood scheme. This is made up of ongoing maintenance, compound use and staff time.
- 6.2 There is a further commitment of staff time, and thus expense if East Devon District Council are to close the highways flood gates.
- 6.3 It is difficult to judge how often the gates would need to be shut, and thus how much time expenditure will be required. We also anticipate with the future effects of the climate emergency taking affect, the closure rate would increase into the future. We have estimated that for each gate closure and opening cycle, it would be an effective cost of £432 per event. This is based on a 2 person team and vehicle at £54 an hour for 8 hours. The 8 hours is estimated as: 2 hours closing the gates and checking all flood gates in Exmouth. 2 Hours to staff the last flood gate on the seafront up until the storm hits. 2 hours on call during high tide. 2 hours to open gates after high tide.
- 6.4 Yearly training and familiarisation will be required for staff. This will also enable the gates to be tested every year to check they are operational prior to storm season. Training 6 people up each year allows for resilience and staff turnover. The annual cost for training would be £648.
- 6.5 The community operated gates also require financial expense from East Devon District Council, however this will be significantly less then East Devon District Council operating all gates. The financial expense estimate for helping the Environment Agency set up and manage the community gate closure group is outlined below.

Task	Hours	Daily External Rate estimate	Total
Assist setting up community group including community training	80	£50	£4,000
Yearly community group administration	7	£50	£350

- 6.6 Below is a table indicating the anticipated frequency of gate closures over the schemes duration. Note this is rough estimate so subject to less or more frequent closures, but aids in giving an approximate figure of total cost for the scheme. It includes the yearly estimate for staff time cost and total staff time cost for 100 years operation. Note the figures have not been discounted into the future.

Years	Anticipated number of closures	Average Yearly cost per year
Year 1	2 per year	£5,512
Year 2-3	2 per year	£1,862
Year 4 -10	1 per year	£1,526
Year 11-20	2 per year	£1,862
Year 21-40	3 per year	£2,294
Year 41-60	4 per year	£2,726
Year 61-80	5 per year	£3,158
Year 81-100	6 per year	£3,590

Total 100 year cost		£273,898
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* A higher initial closure rate of the gates is expected, due to gate closure criteria being initially conservative. It is anticipated the gate closure criteria will be updated to become more accurate to avoid false alarms.

6.7 We expect that the majority of the gate closure work will be carried out during normal working hours, so the net cost to the council will be minimal, however this will be at a detriment to other work carried out by the council, which may need to be replaced with overtime working or agency staff. Therefore these are real costs.

6.8 Although a lot of the work can be done during working hours, storms and tides are unpredictable, so staff attendance is likely outside of work hours. Out of hours working attracts overtime payments, which will need to be covered above and beyond the normal workday budget.

7. Risks to the Council

7.1 If East Devon District Council do not take on the operation of the highways gates, worst case scenario is that no-one would close the gates, leaving Exmouth at significant flood risk. If another organisation can operate the gates, they are likely to be less responsive than East Devon District Council. A community gate closure group can't close the highways gates, as firstly they would need to be Chapter 8 trained, and secondly Devon County Council are unlikely to authorise a non-authority body to close the public highway.

7.2 If the community gate operation group fails to be incepted, or disbands, these gates would be left with no-one to close them. It is likely these gates would fall to East Devon District Council to close until a new community gate group is set up.

7.3 If the gates are not closed by any party, no party would be financial liable for any damage caused by the gates being left open. Their closure is on a best endeavours basis and this is reflected in the memorandum of understanding document.



Image 3: Photo of Exmouth being during Storm Frank 30/12/2015 (Pinterest)