

UPDATES TO THE STRATEGIC FLOOD RISK ASSESSMENT

FOR THE

DRAFT GALWAY COUNTY DEVELOPMENT PLAN 2022-2028

for: Galway County Council

Áras an Chontae
Prospect Hill
Galway



Comhairle Chontae na Gaillimhe
Galway County Council

by: CAAS Ltd.

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FEBRUARY 2022

Updates on Foot of Submissions Received

The table below identifies updates to be made to the Strategic Flood Risk Assessment (SFRA) report that was placed on public display alongside the Draft Galway County Development Plan 2022-2028 on foot .

No.	Updates to SFRA/Plan relating to SFRA
1	In the final SFRA Report, to provide a finer granularity to the Justification Tests provided on Table 5 of the SFRA report, including identifying both the lands in question and the five points under Criterion no. 2. Details of failed Justification Tests are provided at the end of this document. Material Alterations in relation to these failures have been proposed - please refer to Proposed Material Alterations documents.
2	To update the wording of Policy Objective FL 8 - please refer to Proposed Material Alterations documents.
3	The "N59 Moycullen Bypass" area shown on the Land Use Zoning map represents the boundary of a permitted development and does not represent a Land Use Zoning Objective - please refer to Proposed Material Alterations documents.
4	Insert a new Policy Objective FL18 Consultation with OPW - please refer to Proposed Material Alterations documents.
5	Qualify land use zoning provisions contained in Volume 2 of the Plan - please refer to Proposed Material Alterations documents.
6	In the SFRA, to replace "CFRAM studies are being undertaken for each of the six river basin districts in Ireland" with "The National CFRAM programme was completed in 2018".
7	In the SFRA, to update the reference to www.cfram.ie to www.floodinfo.ie and to update the reference to www.floodmaps.ie to www.floodinfo.ie
8	In the SFRA, to include ICPSS mapping separately in the list of flood zone data. To also refer to emerging new data including the National Coastal Flooding Hazard Mapping 2021.
9	To include a description of the historical and predictive groundwater mapping in the SFRA.
10	To update the SFRA to include the correct wording and numbering for Policy Objectives.
11	<p>To insert the following text into the SFRA under a new subsection titled "Sustainable Urban Drainage Systems":</p> <p>"As provided for by Policy Objective FL 8, all new developments should be adequately serviced with surface water drainage infrastructure and promote the use of Sustainable Drainage Systems. Surface water run-off from development sites will be limited to pre-development levels and planning applications for new developments will be required to provide details of surface water drainage and sustainable drainage systems proposals.</p> <p>As provided for by DM Standard 68, "Sustainable Drainage Systems (SuDS)", all new developments (including amendments / extensions to existing developments) will be required to incorporate 'Sustainable Urban Drainage Systems' (SuDS) as part of the development/design proposals. SuDS are effective technologies, which aim to reduce flood risk, improve water quality and enhance biodiversity and amenity. The systems should aim to mimic the natural drainage of the application site to minimise the effect of a development on flooding and pollution of existing waterways.</p> <p>SuDS include devices such as swales, permeable pavements, filter drains, storage ponds, constructed wetlands, soakways and green roofs. In some exceptional cases, and at the discretion of the Council, where it is demonstrated that SuDS devices are not feasible, approval may be given to install underground attenuation tanks or enlarged pipes in conjunction with other devices to achieve the required water quality.</p> <p>Such alternative measures will only be considered as a last resort. Proposals for surface water attenuation systems should include maintenance proposals and procedures.</p> <p>Development proposals will be required to be accompanied by a comprehensive SuDS assessment that addresses run-off rate, run-off quality and its impact on the existing habitat and water quality.</p> <p>This approach using SuDS offers a total solution to rainwater management and is applicable in both urban and rural situations. Current best practice guidance on SuDS is available from the Guidance Documents produced by the Greater Dublin Strategic Drainage Study (GSDSDS)."</p>

Assessment of Proposed Material Alterations

A number of Proposed Material Alterations resulted in changes to settlement boundaries and the need to identify flood zones in additional areas. The updated flood risk indicator and zone mapping prepared to take account of this issue is appended to this report. The table below identifies the SFRA advice on Proposed Material Alterations that would have the potential to affect compliance with the Flood Risk Management Guidelines. This advice has been integrated into the accompanying SEA Environmental Report.

Alteration Ref. ¹	Assessment and, if relevant, Recommendation
Volume 1 - 7.23 Volume 2 - 19.1	Any potentially conflict between flood risk and the uses possible under the Open Space zoning provided under Amendment No. Volume 1 7.23 and Amendment No. Volume 2 19.1 would be mitigated by other Proposed Material Alterations to the text of Volume 2 that qualify what types of uses would be permissible.
Volume 2 - 1.2 Volume 2 - 1.3 Volume 2 - 2.1 Volume 2 - 2.4 Volume 2 - 4.2 Volume 2 - 8.4 Volume 2 - 10.4 Volume 2 - 3.5 Volume 2 - 7.4 Volume 2 - 7.10 Volume 2 - 9.3 Volume 2 - 10.2 Volume 2 - 12.4	<p>These alterations would potentially conflict proper flood risk management and not comply with the Flood Risk Management Guidelines. There would be potential risk to environmental components including human health and material assets.</p> <p>SFRA Recommendation</p> <p>Do not adopt as part of Draft Plan where non-compliance with the Flood Risk Management Guidelines has been advised.</p> <p>Where such proposals are being adopted it is recommended that the proposal is modified in order to integrate the following requirement, with explicit notification provided on zoning maps:</p> <p>"Inappropriate Development on Flood Zones: Where a development/land use is proposed within any area subject to this objective the development proposal will need to be accompanied by a detailed hydrological assessment and robust SUDS design which demonstrates the capacity to withstand potential flood events to maintain water quality and avoid potential effects to ecological features.</p> <ul style="list-style-type: none"> • Any development proposals should be considered with caution and will be required to comply with The Planning System and Flood Risk Management Guidelines for Planning Authorities/Circular PL2/2014 & the associated Development Management Justification Test. • Climate Change should be duly considered in any development proposal. • Protect the riparian zones of watercourse systems throughout the plan area through a general 10 metre protection buffer from rivers within the plan area as measured from the near river bank, (this distance may be increased and decreased on a site by site basis, as appropriate). • Any development proposals submitted for this site will require a detailed ecological report (s), carried out by suitably qualified personnel for the purposes of informing Appropriate Assessment Screening by Galway County Council, the competent authority. • The relevant lands will be outlined and flagged with a symbol on the land use zoning map and on the GIS system of Galway County Council so that staff and the public are aware of the special conditions/constraints attached. • A briefing will be provided to relevant staff within Galway County Council on the special conditions and constraints on relevant lands." <p>Note that in instances whereby a land use zoning objective for Open Space or Tourism or Community Infrastructure is being provided by an alteration to areas previously unzoned by the Draft Plan, potential effects would be mitigated by other Proposed Material Alterations to the text of Volume 2 that qualify what types of uses would be permissible.</p>

¹ For detail on Proposed Material Alterations please refer to Proposed Material Alterations document.

Previously Developed Lands in Question and Failed Justification Test

Settlement	Are the lands previously developed and within Flood Zone A and/or B?	Zoning in Draft Plan	Area	Justification Test Fails, if one of the following fails All must be passed for the test to be passed				Recommended Zoning for Proposed Material Alteration
				Is the settlement targeted for growth under the RSES, existing CDP and Draft CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria ² must be satisfied	SFRA recommendation integrated into the Plan for management of risk?	Overall Result	
Baile Chláir	Yes	Town Centre	0.319	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity

Undeveloped Lands in Question and Failed Justification Tests

Settlement	Are the lands undeveloped and within Flood Zone A and/or B?	Zoning in Draft Plan	Area	Justification Test Fails, if one of the following fails All must be passed for the test to be passed				Recommended Zoning for Proposed Material Alteration
				Is the settlement targeted for growth under the RSES, existing CDP and Draft CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria ³ must be satisfied	SFRA recommendation integrated into the Plan for management of risk?	Overall Result	
An Cheathru Rua	Yes	Residential Existing	0.085	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Baile Chláir	Yes	Town Centre	0.094	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Baile Chláir	Yes	Residential Existing	0.136	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Baile Chláir	Yes	Town Centre	0.319	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Ballygar	Yes	Residential Existing	0.051	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Clifden	Yes	Residential Existing	0.169	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Clifden	Yes	Town Centre	0.011	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity

² (i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;

(ii) Comprises significant previously developed and/or under-utilised lands;

(iii) Is within or adjoining the core of an established or designated urban settlement;

(iv) Will be essential in achieving compact and sustainable urban growth; and

(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.

³ (i) Is essential to facilitate regeneration and/or expansion of the centre of the urban settlement;

(ii) Comprises significant previously developed and/or under-utilised lands;

(iii) Is within or adjoining the core of an established or designated urban settlement;

(iv) Will be essential in achieving compact and sustainable urban growth; and

(v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.

Settlement	Are the lands undeveloped and within Flood Zone A and/or B?	Zoning in Draft Plan	Area	Justification Test Fails, if one of the following fails All must be passed for the test to be passed				Recommended Zoning for Proposed Material Alteration
				Is the settlement targeted for growth under the RSES, existing CDP and Draft CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria ³ must be satisfied	SFRA recommendation integrated into the Plan for management of risk?	Overall Result	
Dunmore	Yes	Town Centre	0.137	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Dunmore	Yes	Residential Existing	0.085	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Dunmore	Yes	Town Centre	0.565	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Dunmore	Yes	Residential Existing	0.511	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Garraun	Yes	Residential Phase 1	0.002	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Kinvara	Yes	Residential Existing	0.162	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Maigh Cullinn	Yes	Residential Phase 2	0.087	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Oranmore	Yes	Residential Phase 2	0.291	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Oranmore	Yes	Residential Phase 2	0.26	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Oranmore	Yes	Residential Existing	0.477	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Oranmore	Yes	Residential Existing	0.398	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Oughterard	Yes	Residential Existing	0.101	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Oughterard	Yes	Town Centre	0.132	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Oughterard	Yes	Residential Existing	0.197	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Oughterard	Yes	Tourism	0.039	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Oughterard	Yes	Residential Infill	0.066	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity
Portumna	Yes	Industrial	0.046	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity

Settlement	Are the lands undeveloped and within Flood Zone A and/or B?	Zoning in Draft Plan	Area	Justification Test Fails, if one of the following fails All must be passed for the test to be passed				Recommended Zoning for Proposed Material Alteration
				Is the settlement targeted for growth under the RSES, existing CDP and Draft CDP?	Is the zoning of the lands required to achieve the proper planning and sustainable development of the settlement? All sub-criteria ³ must be satisfied	SFRA recommendation integrated into the Plan for management of risk?	Overall Result	
Portumna	Yes	Town Centre	0.367	Yes	No – as at least one sub-criterion fails: (v) There are no suitable alternative lands for the particular use or development type, in areas at lower risk of flooding within or adjoining the core of the urban settlement.	Yes	Fail	Open Space/Recreation & Amenity

Galway County Development Plan 2022- 2028

Strategic Flood Risk Assessment Galway Settlements

Appendix II

01-Feb-2022



Comhairle Chontae na Gaillimhe
Galway County Council



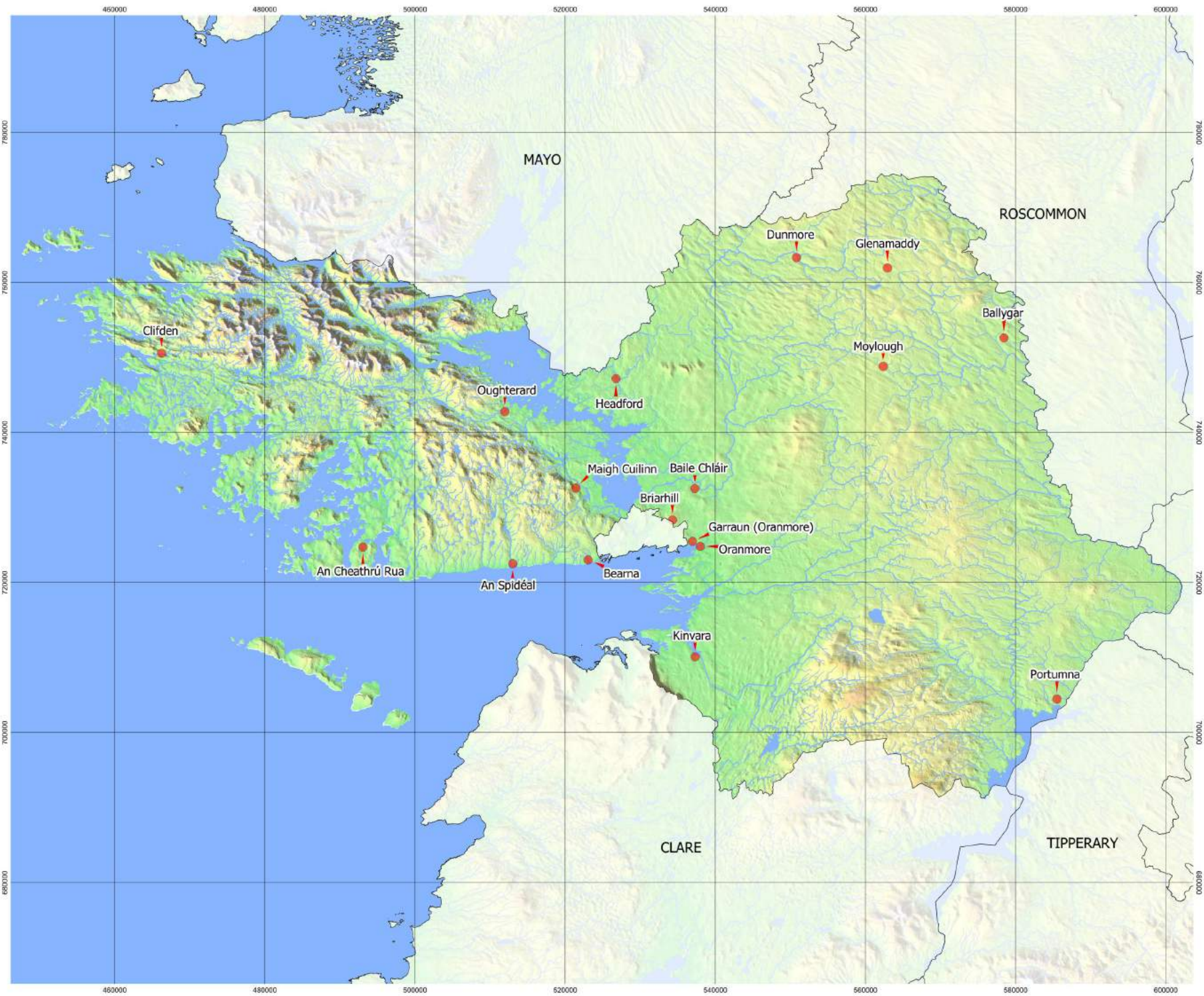
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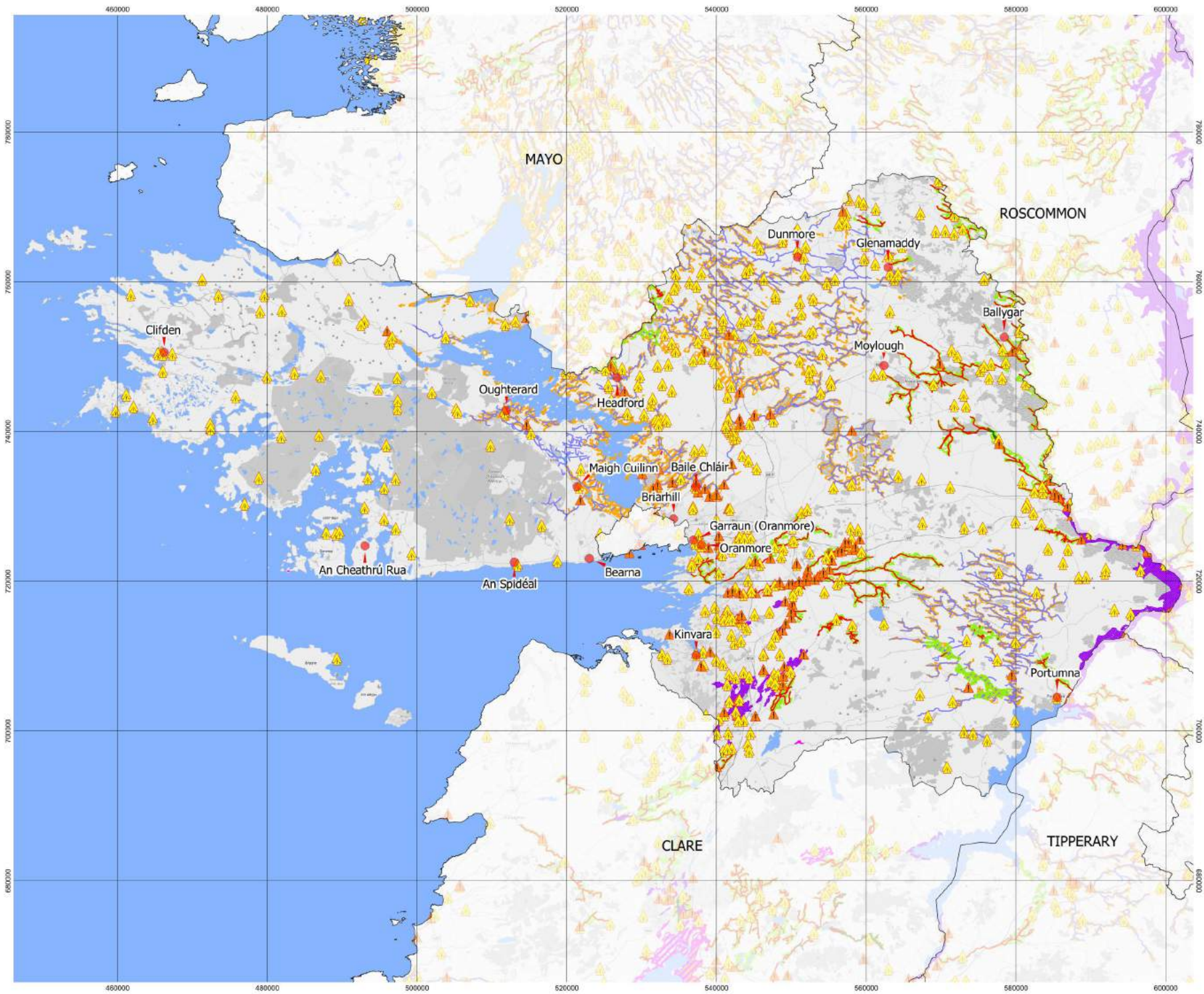


**Galway CDP 2022-2028
SFRA
Settlements**

- Administrative Area
- Settlement/Plan
- River or Stream
- Water



**Galway CDP 2022-2028
SFRA
OPW Historical Flood Data**



- Administrative Area
- Settlement/Plan
- Water
- Arterial Drainage Scheme**
 - Channel
 - Embankment
 - Benefited Land
- Drainage Districts**
 - Channel
 - Embankment
 - Benefited Land
- Land Commission**
 - Benefited Land
- Past Flood Event**
 - Single Flood Event
 - Recurring Flood Event
 - Past Flood Extent



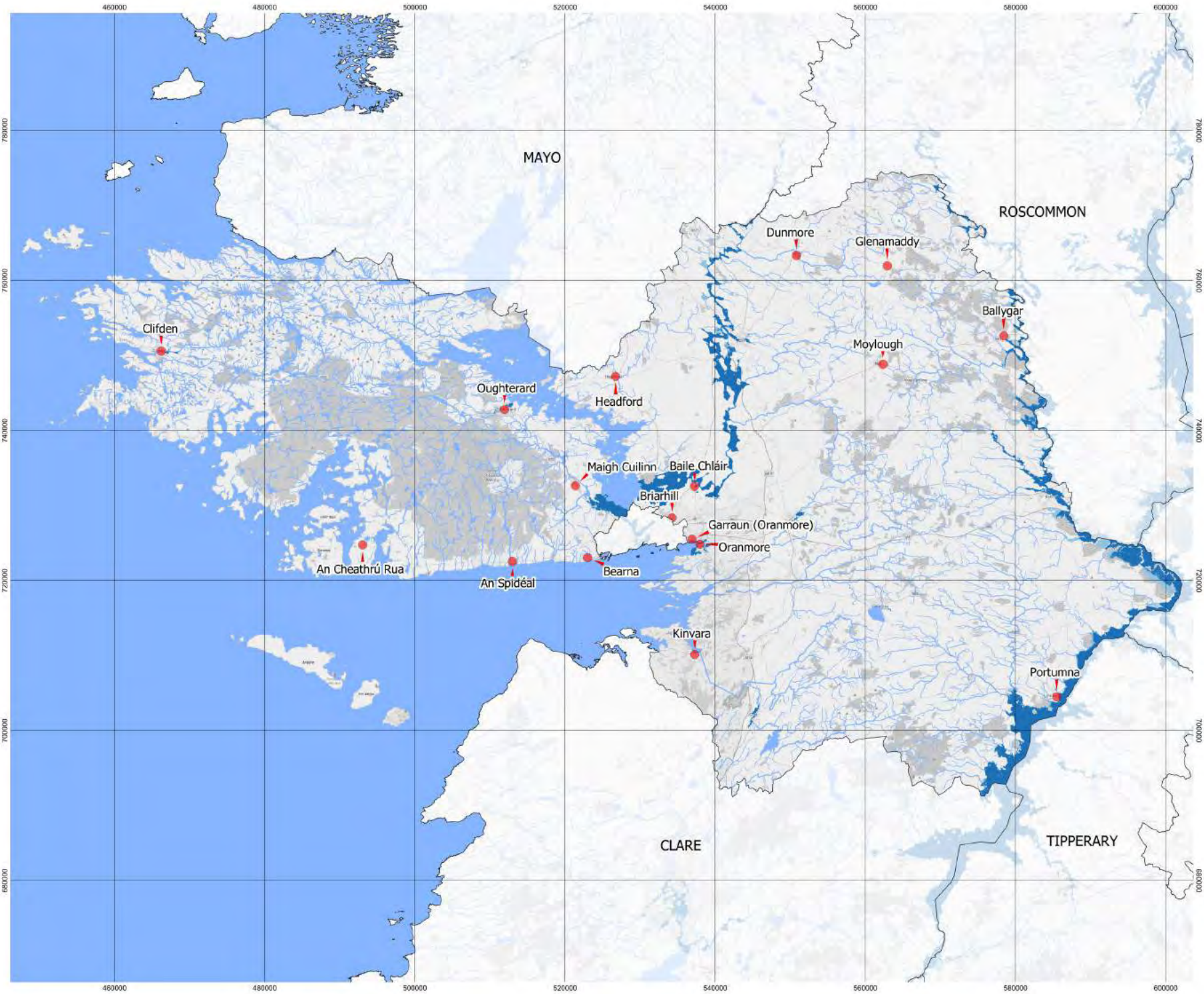
**Galway CDP 2022-2028
SFRA
OPW Preliminary Flood Risk Assessment (PFRA)**



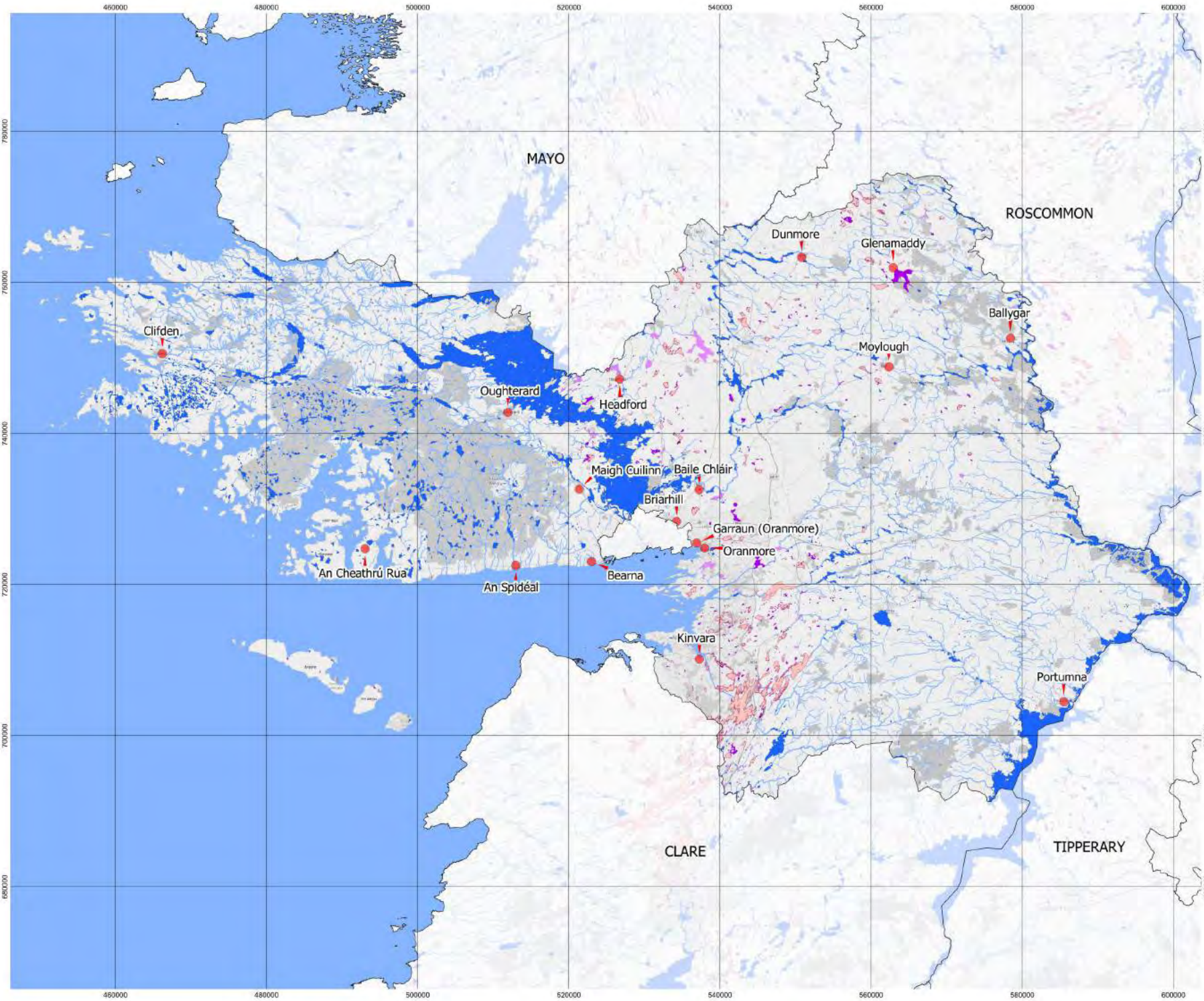
- Administrative Area
- Settlement/Plan
- River or Stream
- Water
- PFRA Fluvial**
 - PFRA Fluvial 1% AEP
 - PFRA Fluvial 0.1% AEP
- PFRA Pluvial**
 - PFRA Pluvial 1% AEP
 - PFRA Pluvial 0.1% AEP
- PFRA Coastal**
 - PFRA ICPSS Coastal 0.5% AEP
 - PFRA ICPSS Coastal 0.1% AEP

**Galway CDP 2022-2028
SFRA
OPW Catchment Flood
Risk Assessment &
Management (CFRAM)**

-  Administrative Area
 -  Settlement/Plan
 -  River or Stream
 -  Water
- CFRAM All Scenarios**
-  Present Day 0.1% AEP
 -  Mid-Range Future Scenario 0.1% AEP
 -  High-End Future Scenario 0.1% AEP



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Galway CDP 2022-2028 SFRA

GSI Historical Flood Data and Groundwater Predictive Modeling

- Administrative Area
- Settlement/Plan
- River or Stream
- Water

GSI Groundwater Flooding Predictive Model

- High Probability
- Medium Probability
- Low Probability

GSI Historical Flood Data

- Winter 2015-2016 Surface Water Flooding

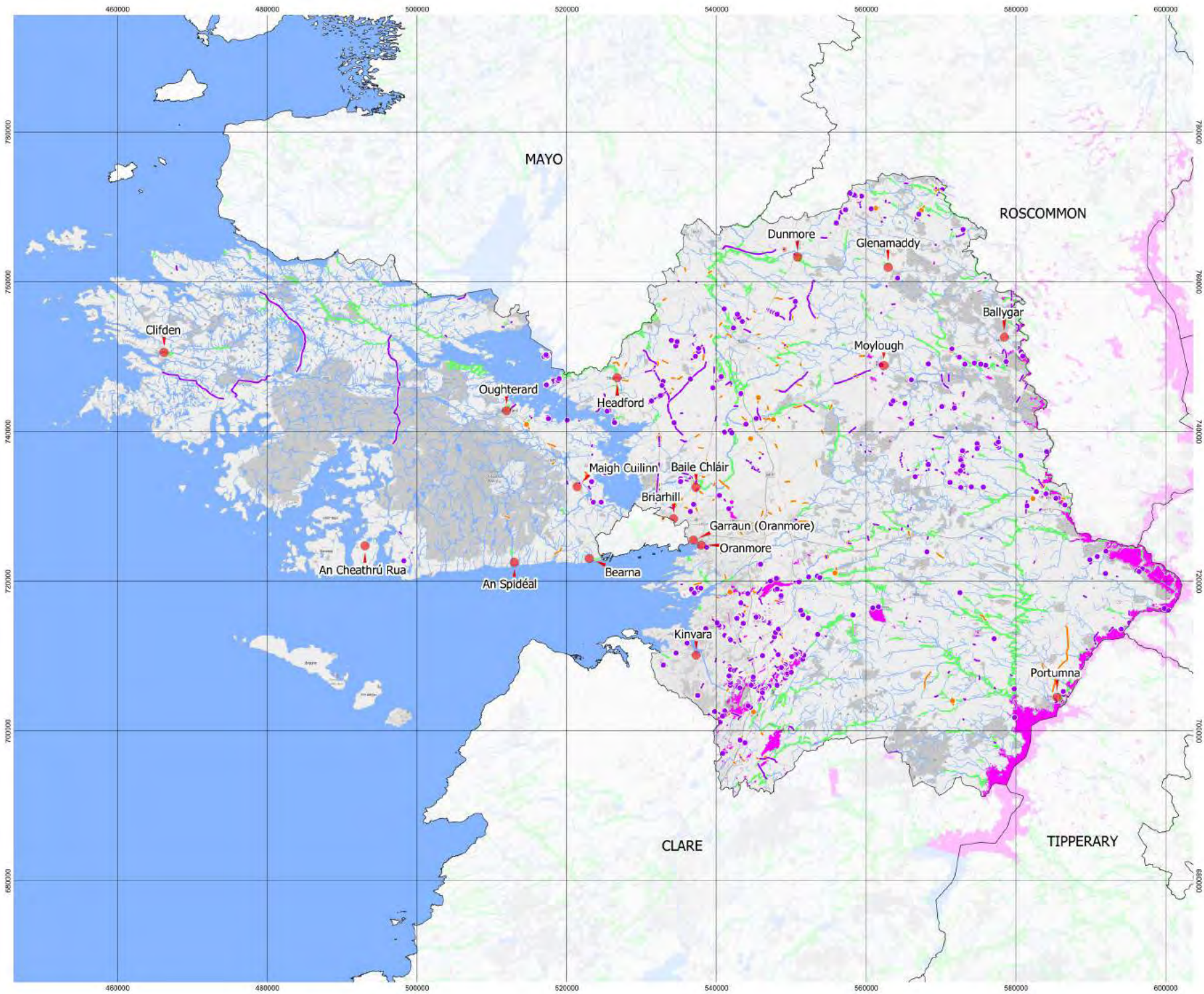
Maximum Historic Groundwater Flooding

- Groundwater
- Groundwater/Surface water



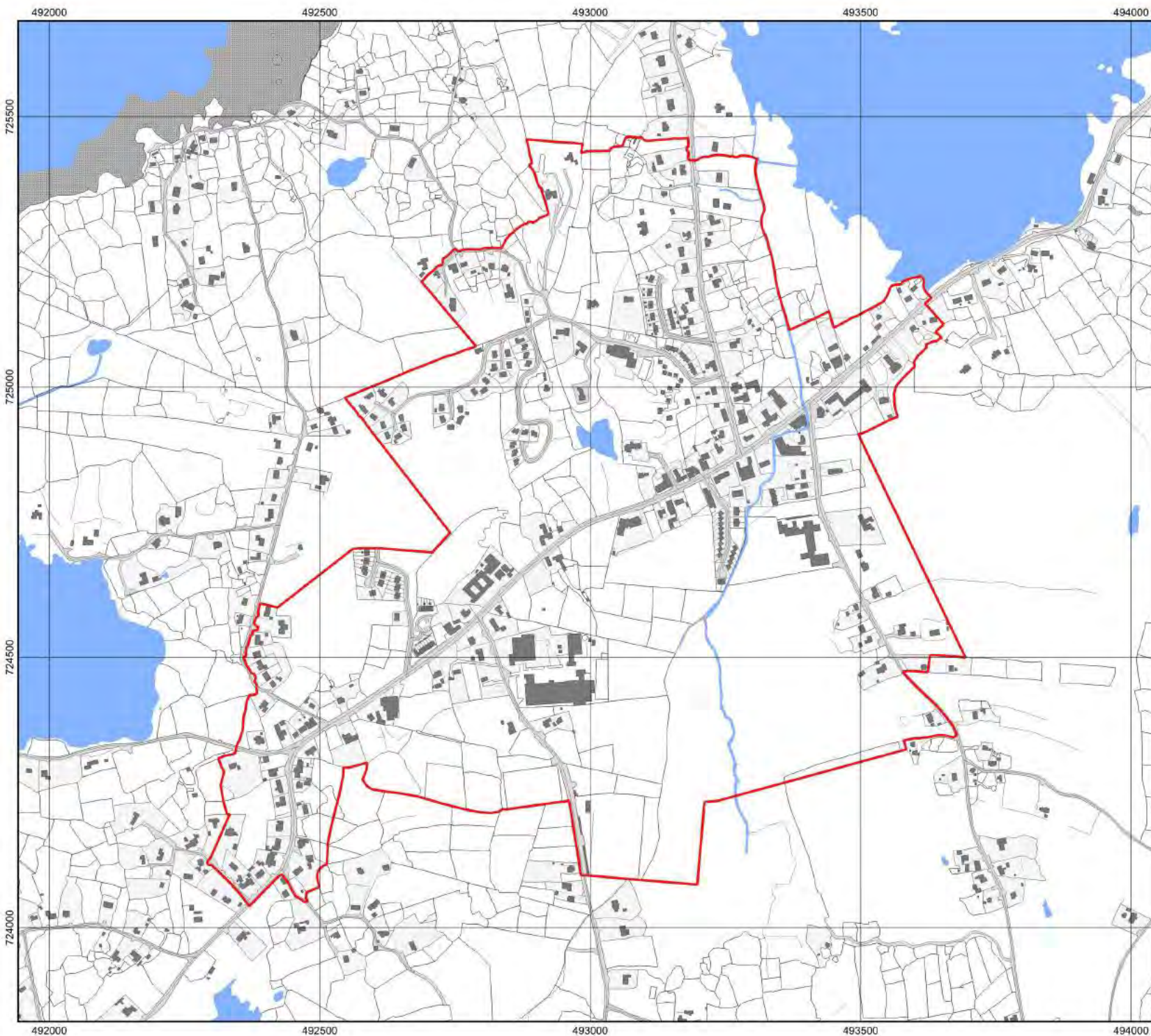
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**Galway CDP 2022-2028
SFRA
Galway County Council
Flood Data**



- Administrative Area
- Settlement/Plan
- River or Stream
- Water
- Historical Flood Data**
 - Flooded Houses Dec 2015
 - Flooded Roads Dec 2015
 - Flood Points 2009
 - Road Closures 2009
 - GCC Floods 09 Combined Sources
- SIS National Soils Database**
 - Alluvial formed in deposits of river, lake, estuarine or marine alluvium





**Galway CDP 2022-2028
SFRA
An Cheathrú Rua
OPW & GCC Historical Indicators**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water

Arterial Drainage Scheme

- Channel
- Embankment
- Benefited Land

Drainage Districts

- Channel
- Embankment
- Benefited Land

Land Commission

- Benefited Land

Past Flood Event

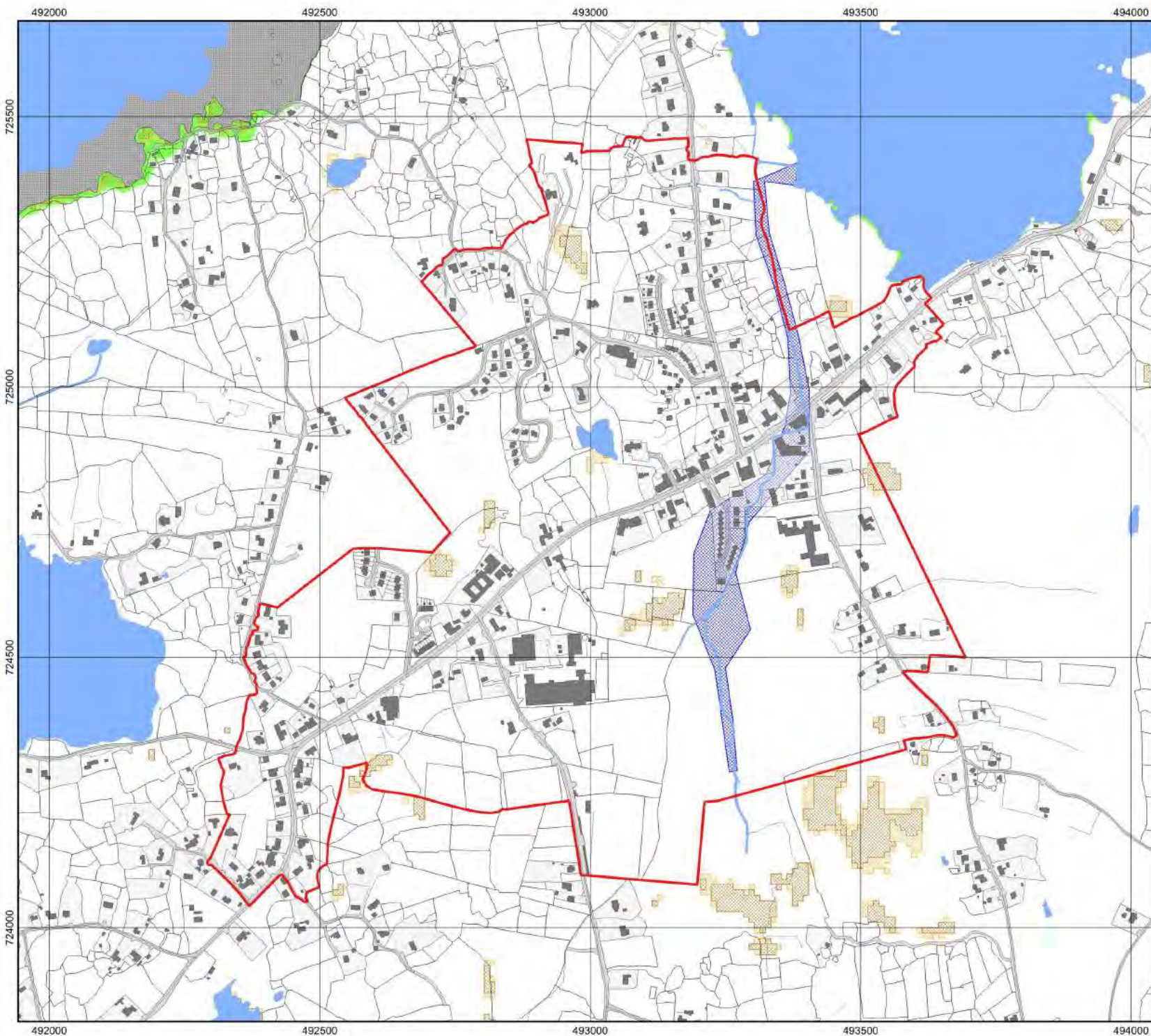
- Single Flood Event
- Recurring Flood Event
- Past Flood Extent

**Galway County Council
Historical Flood Data**

- Flood Points 2009
- Road Closures 2009
- Flooded Houses Dec 2015
- Flooded Roads Dec 2015
- GCC Floods 09 Combined Sources



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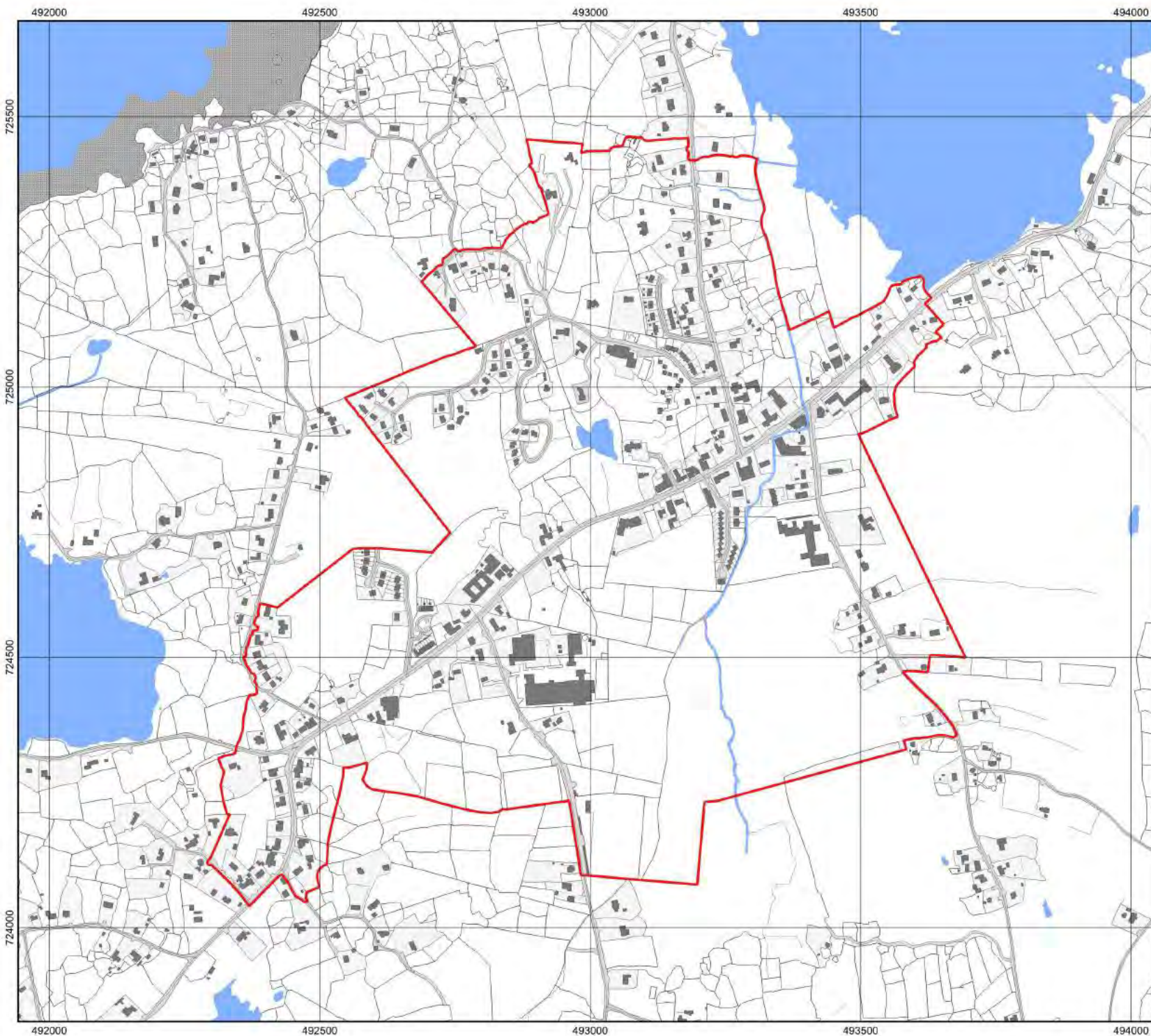
**Galway CDP 2022-2028
SFRA
An Cheathrú Rua
OPW Preliminary Flood Risk
Assessment (PFRA)**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water
- PFRA Fluvial**
 -  PFRA Fluvial 1% AEP
 -  PFRA Fluvial 0.1% AEP
- PFRA Pluvial**
 -  PFRA Pluvial 1% AEP
 -  PFRA Pluvial 0.1% AEP
- PFRA Coastal**
 -  PFRA ICSS Coastal 0.5% AEP
 -  PFRA ICSS Coastal 0.1% AEP






 **Comhairle Chontae na Gaillimhe
Galway County Council**




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**Galway CDP 2022-2028
SFRA**
**An Cheathrú Rua
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario**

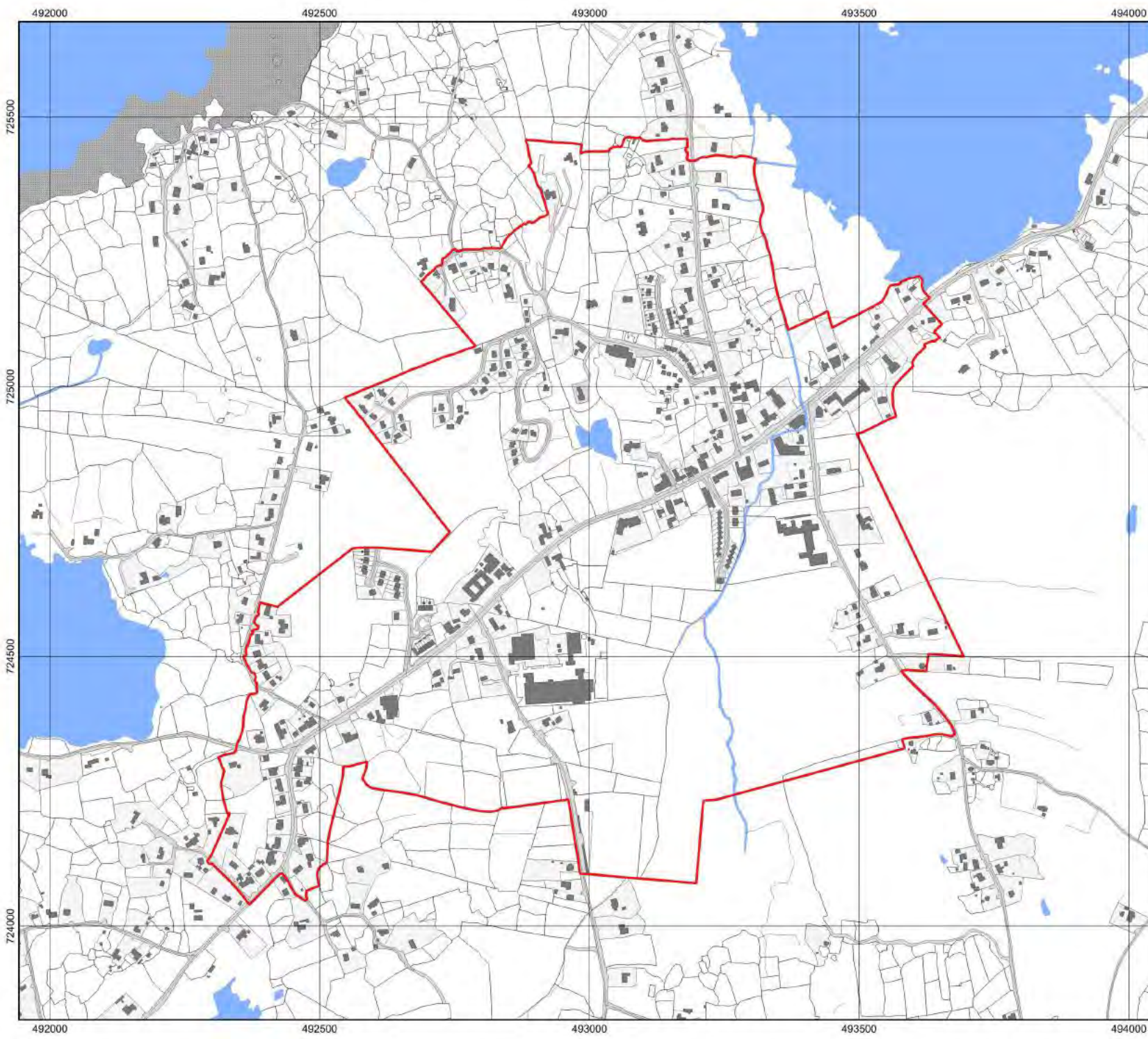
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
Present Day Scenario**





-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent






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**Galway CDP 2022-2028
SFRA**
**An Cheathrú Rua
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios**

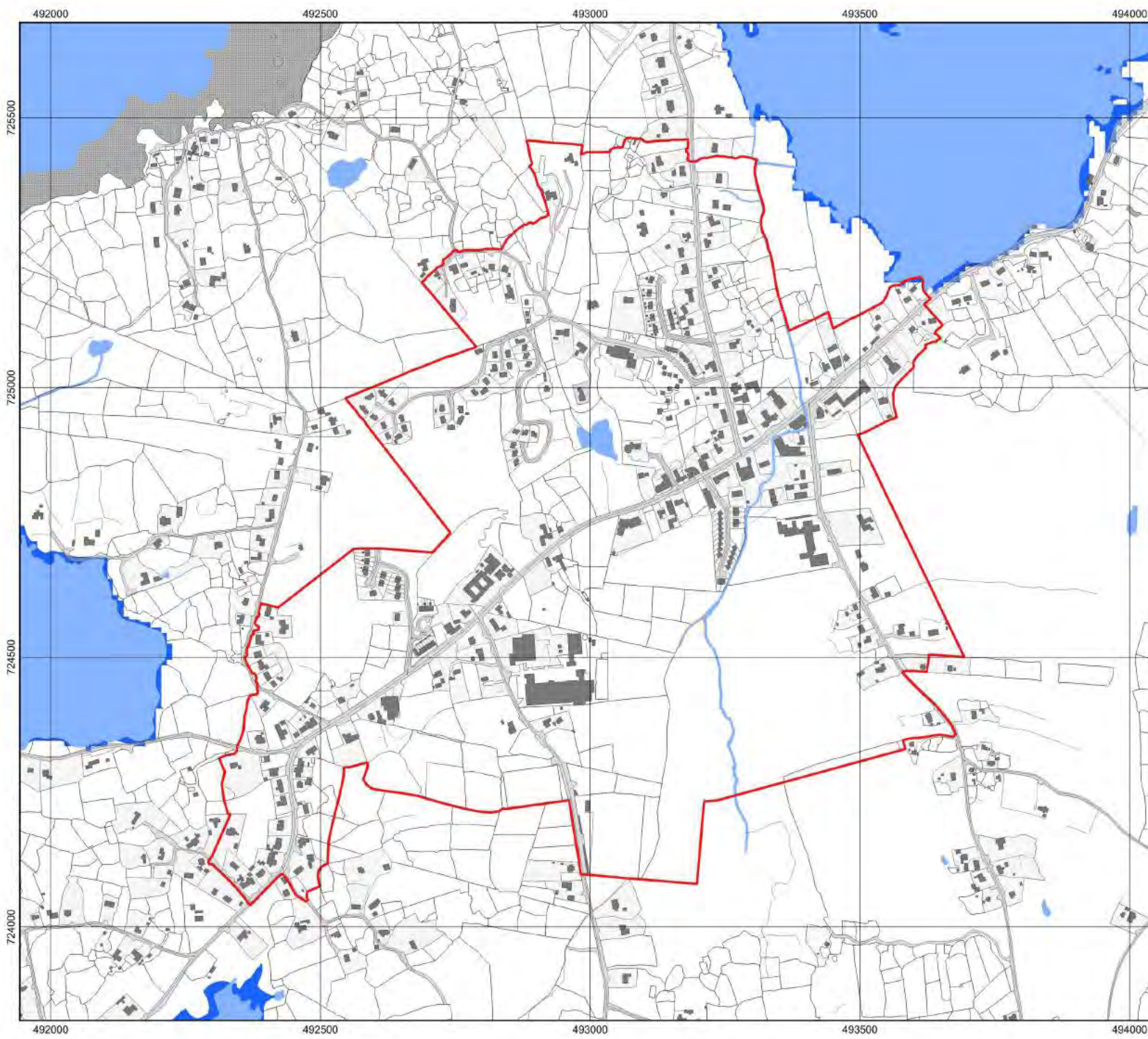
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
All Scenarios**

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP



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**Galway CDP 2022-2028
SFRA
An Cheathrú Rua
GSI Historical Flood Data and
Groundwater Predictive Modeling**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water

**GSI Groundwater Flooding
Predictive Model**

- High Probability
- Medium Probability
- Low Probability

GSI Historical Flood Data

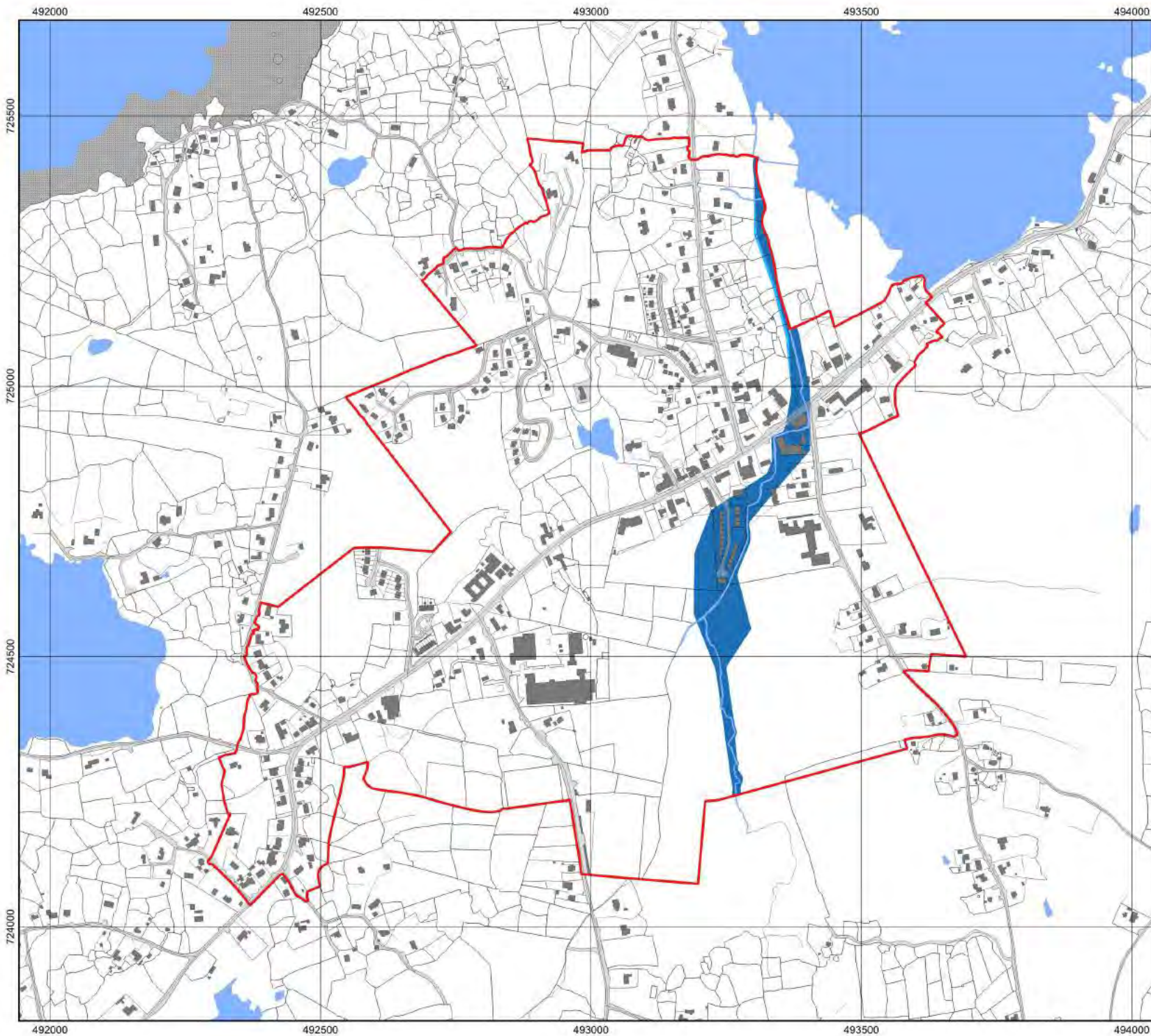
- Winter 2015-2016
Surface Water Flooding

**Maximum Historic Groundwater
Flooding**

- Groundwater
- Groundwater/Surface water



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**Galway CDP 2022-2028
SFRA
An Cheathrú Rua
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water
- Indicative Flood Zones**
-  Flood Zone A
-  Flood Zone B
- Other Zones**
-  Possible Turlough
-  Wet lands, not easily drained



Coordinates in ITM
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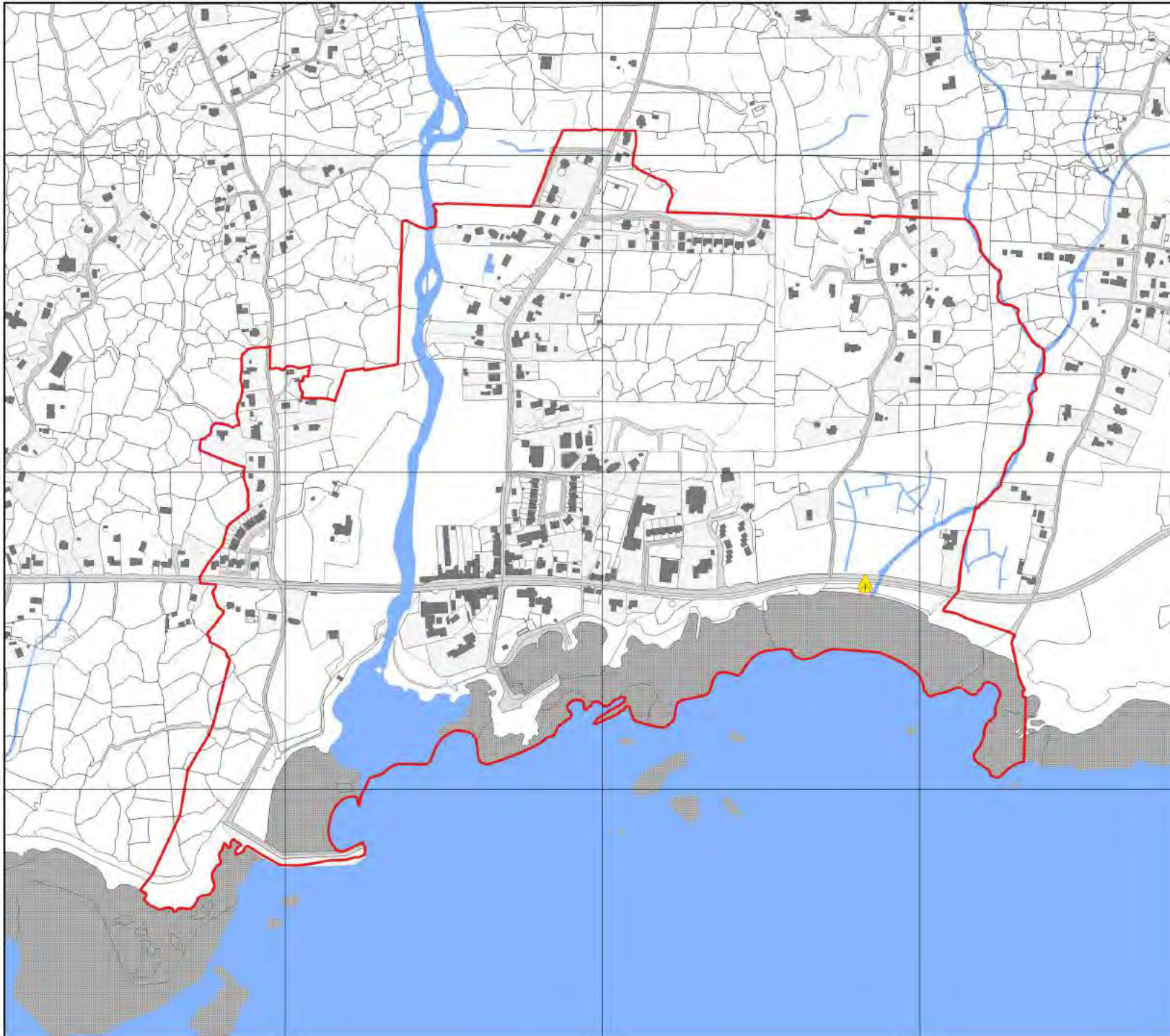
513000

513500

723000

722500

722000



**Galway CDP 2022-2028
SFRA
An Spidéal
OPW & GCC Historical Indicators**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water

Arterial Drainage Scheme

- Channel
- Embankment
- Benefited Land

Drainage Districts

- Channel
- Embankment
- Benefited Land

Land Commission

- Benefited Land

Past Flood Event

- Single Flood Event
- Recurring Flood Event
- Past Flood Extent

Galway County Council

Historical Flood Data

- Flood Points 2009
- Road Closures 2009
- Flooded Houses Dec 2015
- Flooded Roads Dec 2015
- GCC Floods 09 Combined Sources



**Comhairle Chontae na Gaillimhe
Galway County Council**

Coordinates in ITM

Galway County Council 2020/OSI_NMA_090

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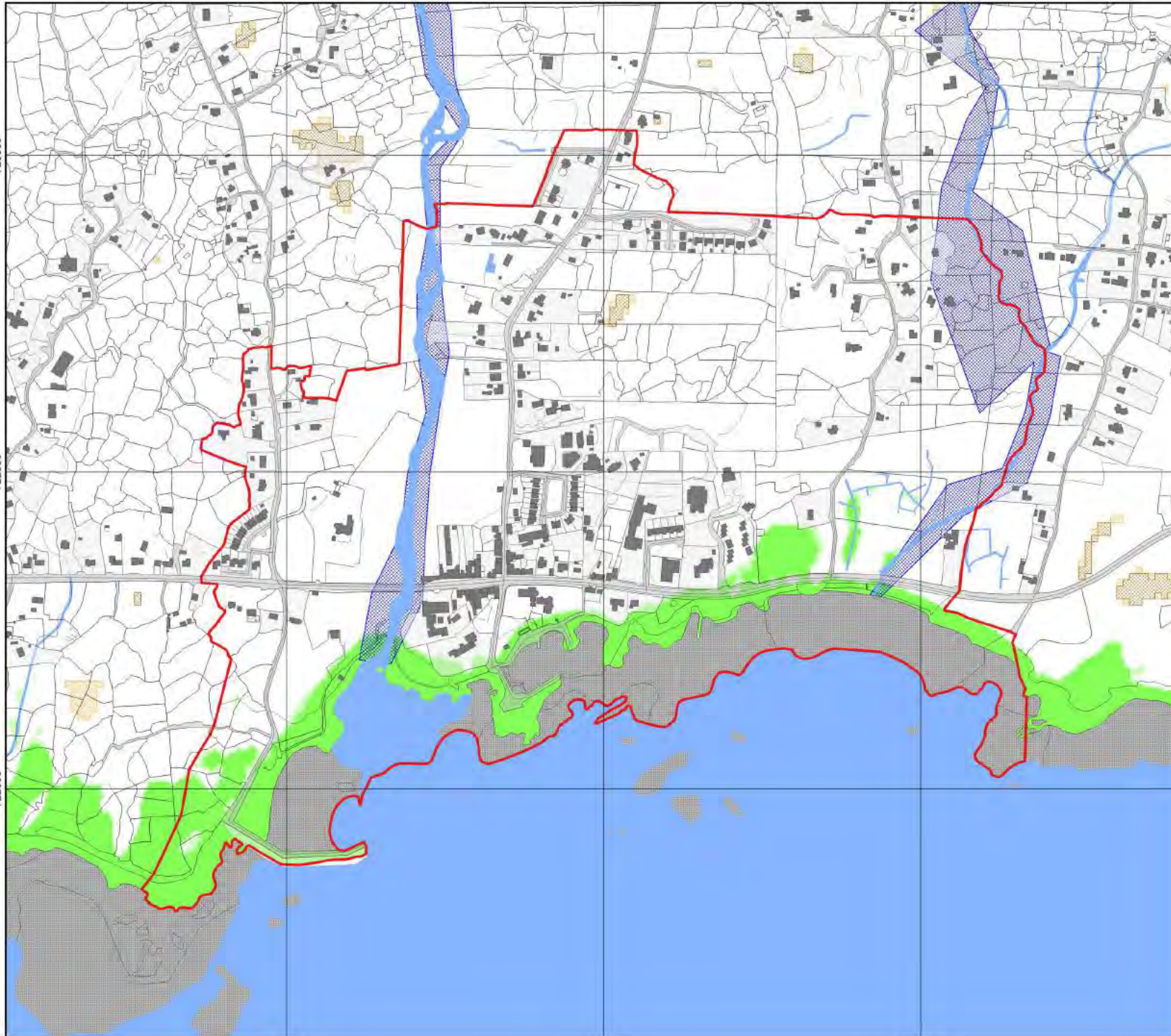
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
Galway CDP 2022-2028

SFRA



An Spidéal OPW Preliminary Flood Risk Assessment (PFRA)

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



PFRA Fluvial

-  PFRA Fluvial 1% AEP
-  PFRA Fluvial 0.1% AEP

PFRA Pluvial

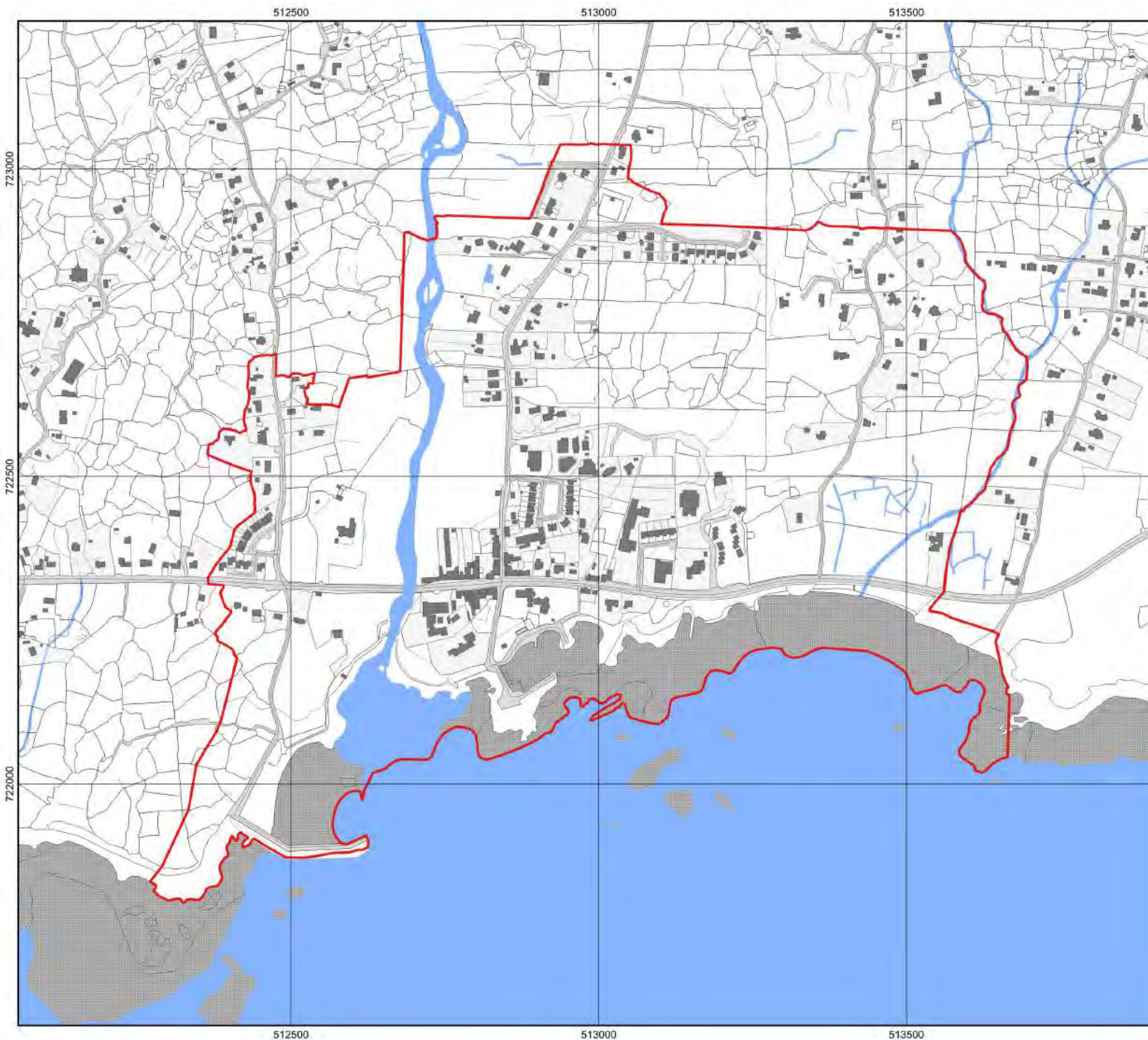
-  PFRA Pluvial 1% AEP
-  PFRA Pluvial 0.1% AEP

PFRA Coastal




-  PFRA ICPSS Coastal 0.5% AEP
-  PFRA ICPSS Coastal 0.1% AEP






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**Galway CDP 2022-2028
SFRA
An Spidéal
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario**

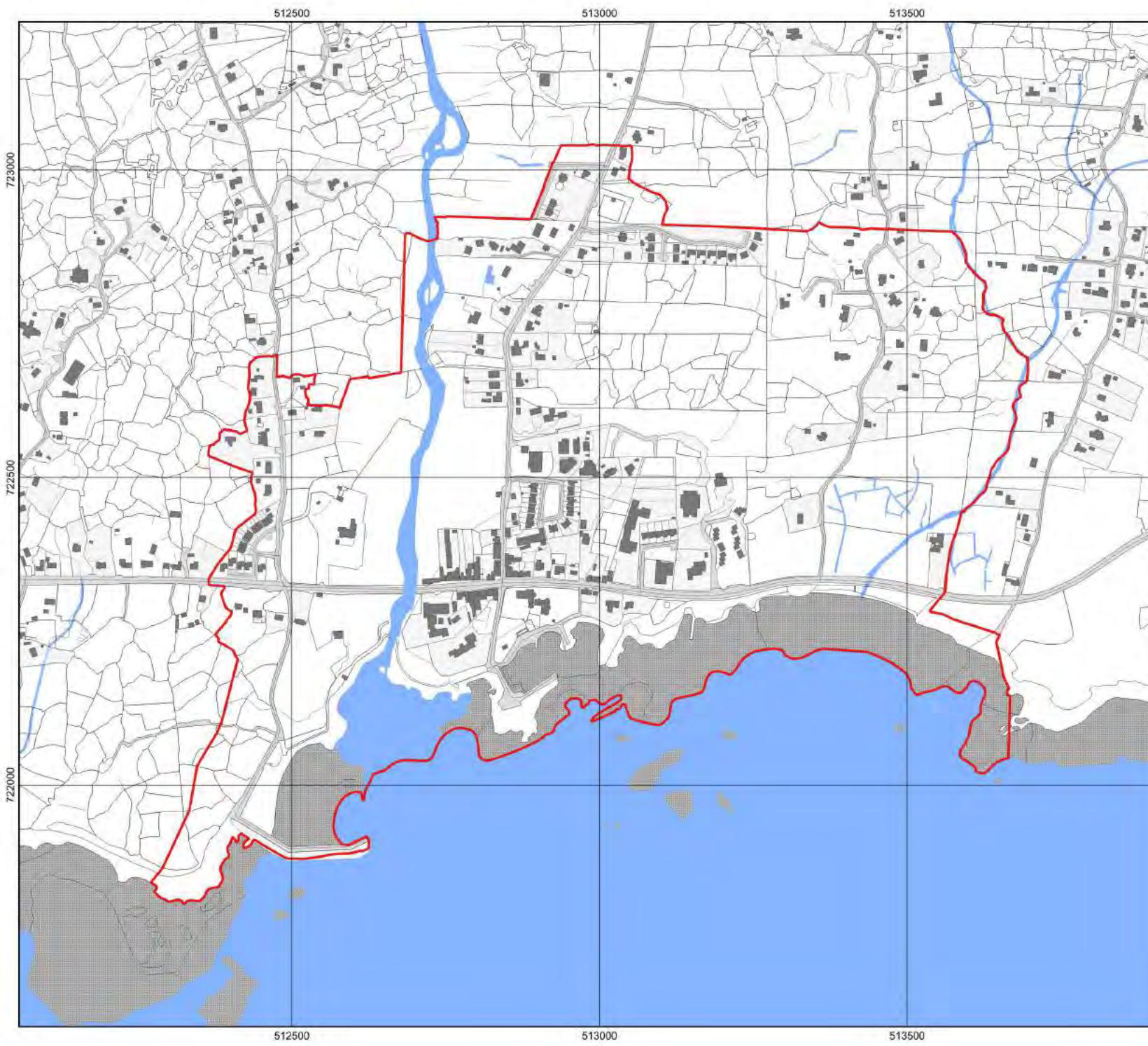
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
Present Day Scenario**





-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent






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**Galway CDP 2022-2028
SFRA**
An Spidéal
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios

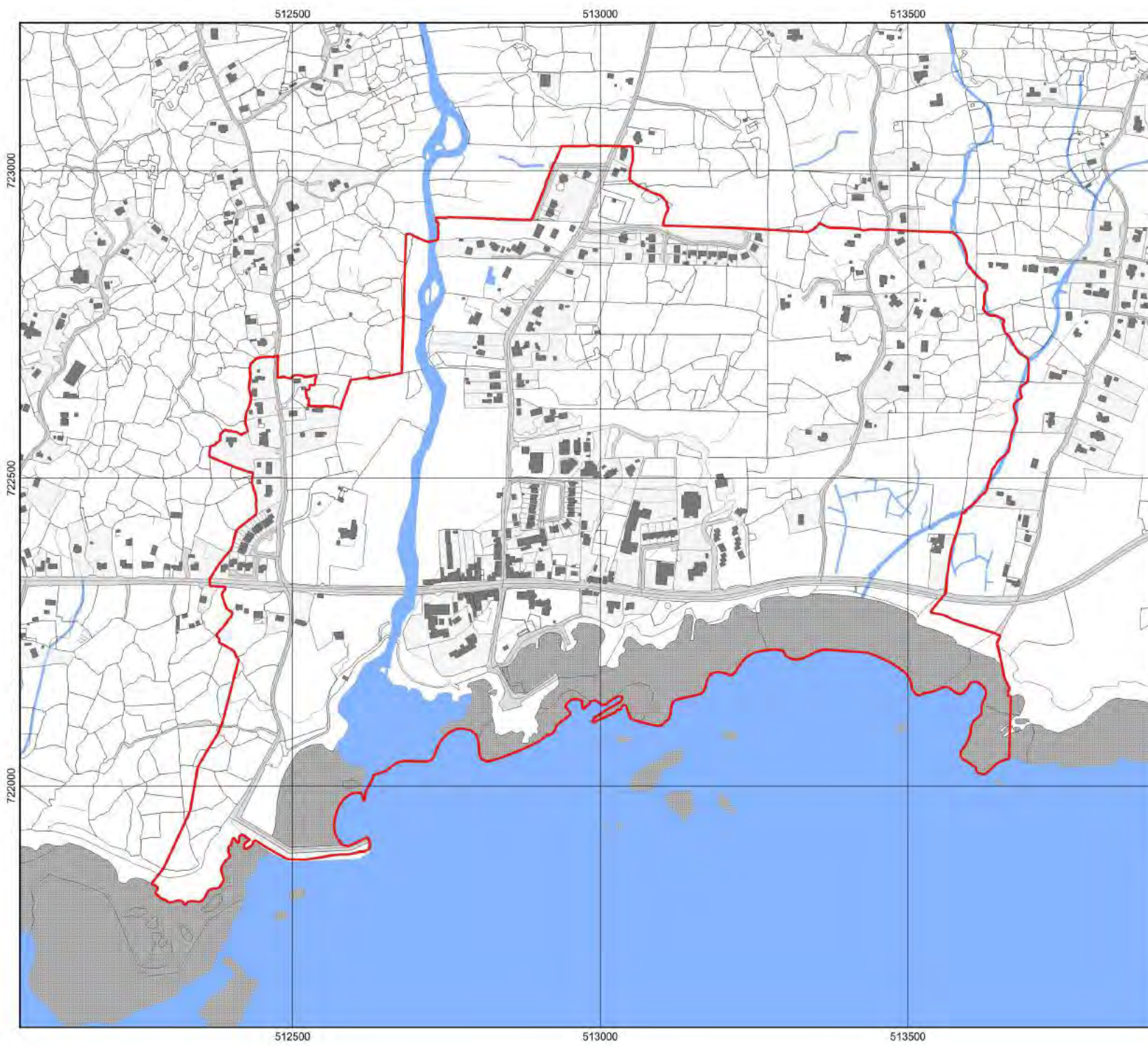
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
All Scenarios**

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP



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**Galway CDP 2022-2028
SFRA
An Spidéal
GSI Historical Flood Data and
Groundwater Predictive Modeling**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water

**GSI Groundwater Flooding
Predictive Model**

- High Probability
- Medium Probability
- Low Probability

GSI Historical Flood Data

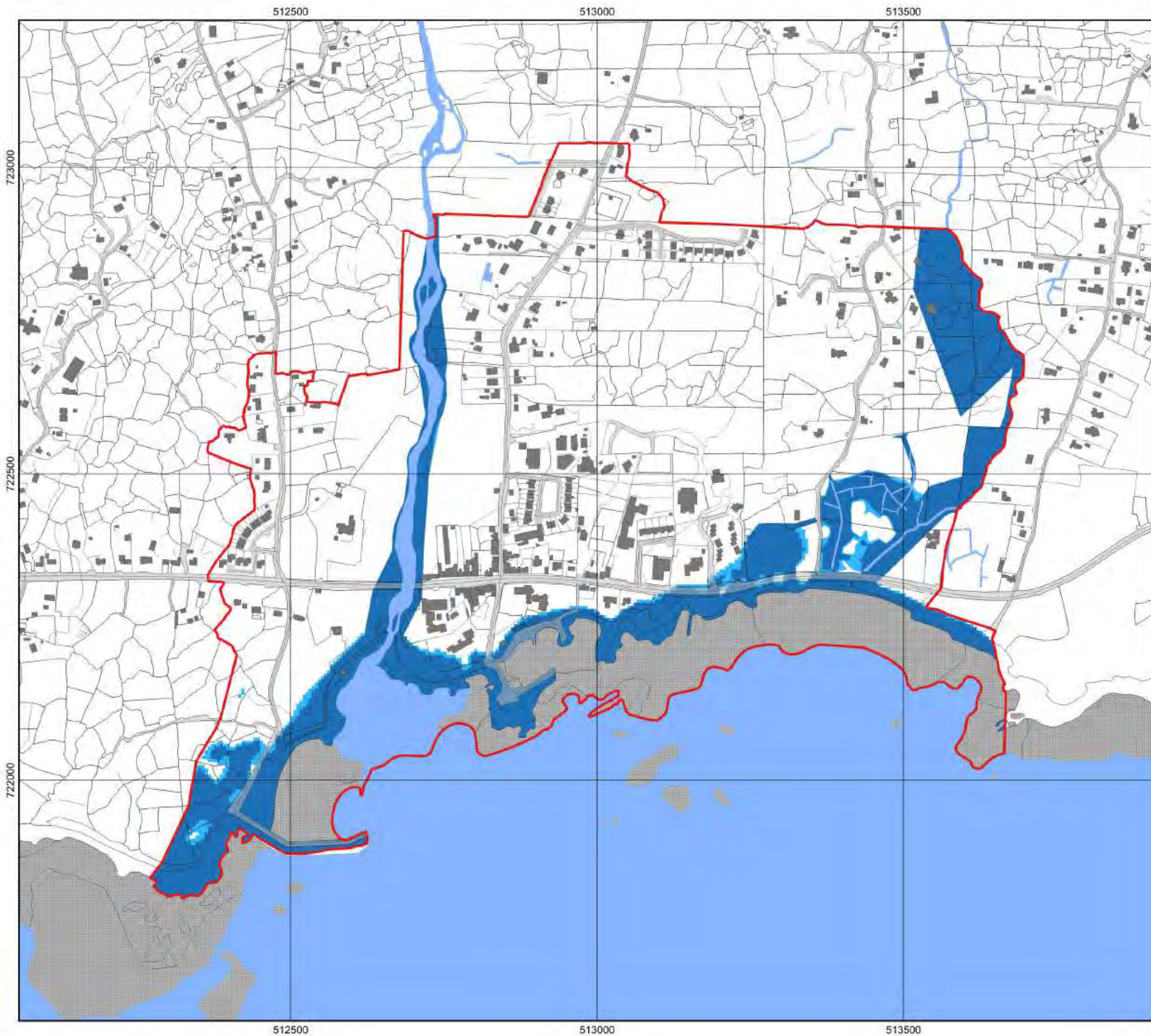
- Winter 2015-2016
Surface Water Flooding

**Maximum Historic Groundwater
Flooding**

- Groundwater
- Groundwater/Surface water



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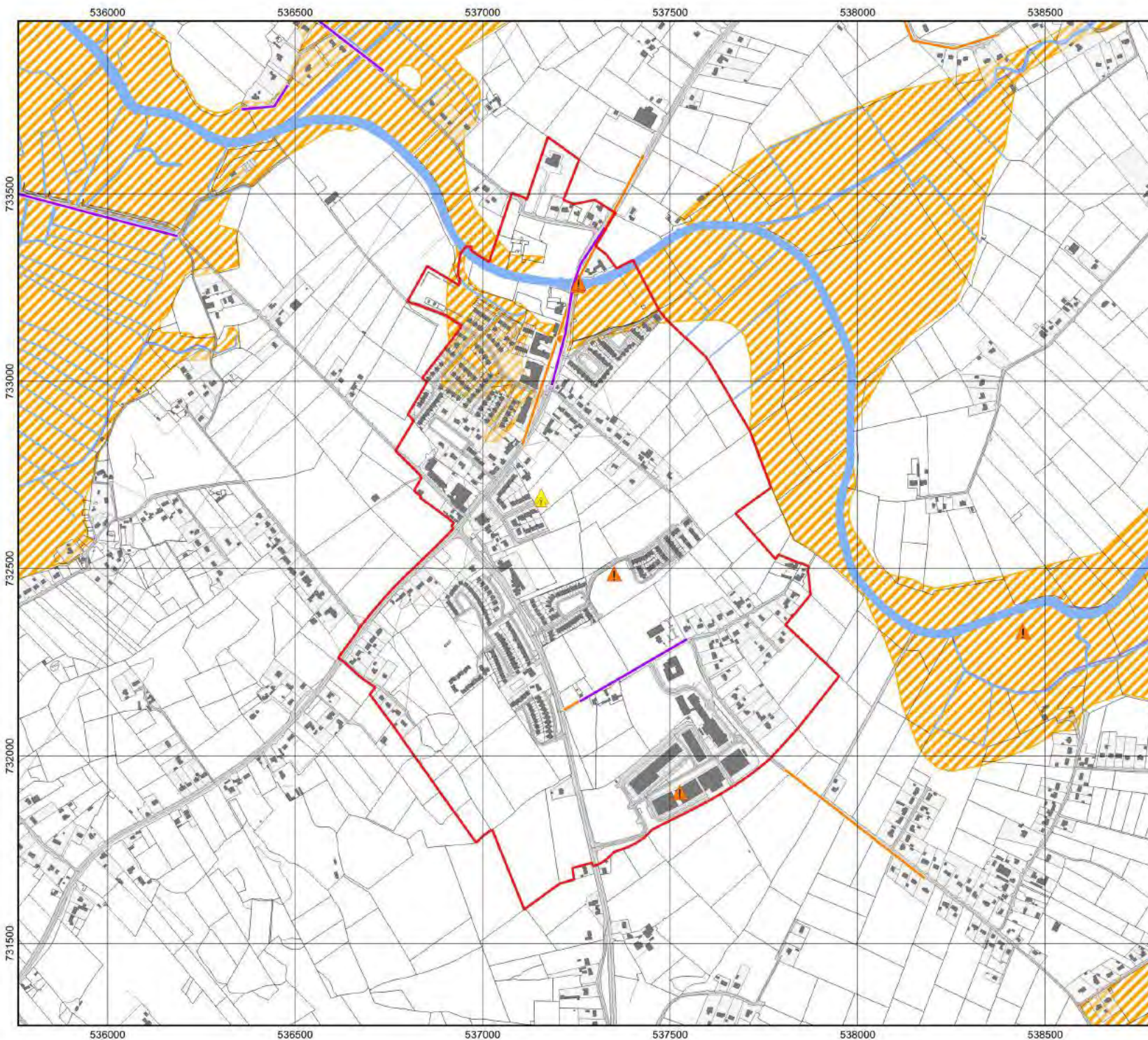


**Galway CDP 2022-2028
SFRA
An Spidéal
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water
- Indicative Flood Zones**
-  Flood Zone A
-  Flood Zone B
- Other Zones**
-  Possible Turlough
-  Wet lands, not easily drained



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**Galway CDP 2022-2028
SFRA
Baile Chláir
OPW & GCC Historical Indicators**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

- Arterial Drainage Scheme**
-  Channel
-  Embankment
-  Benefited Land

- Drainage Districts**
-  Channel
-  Embankment
-  Benefited Land

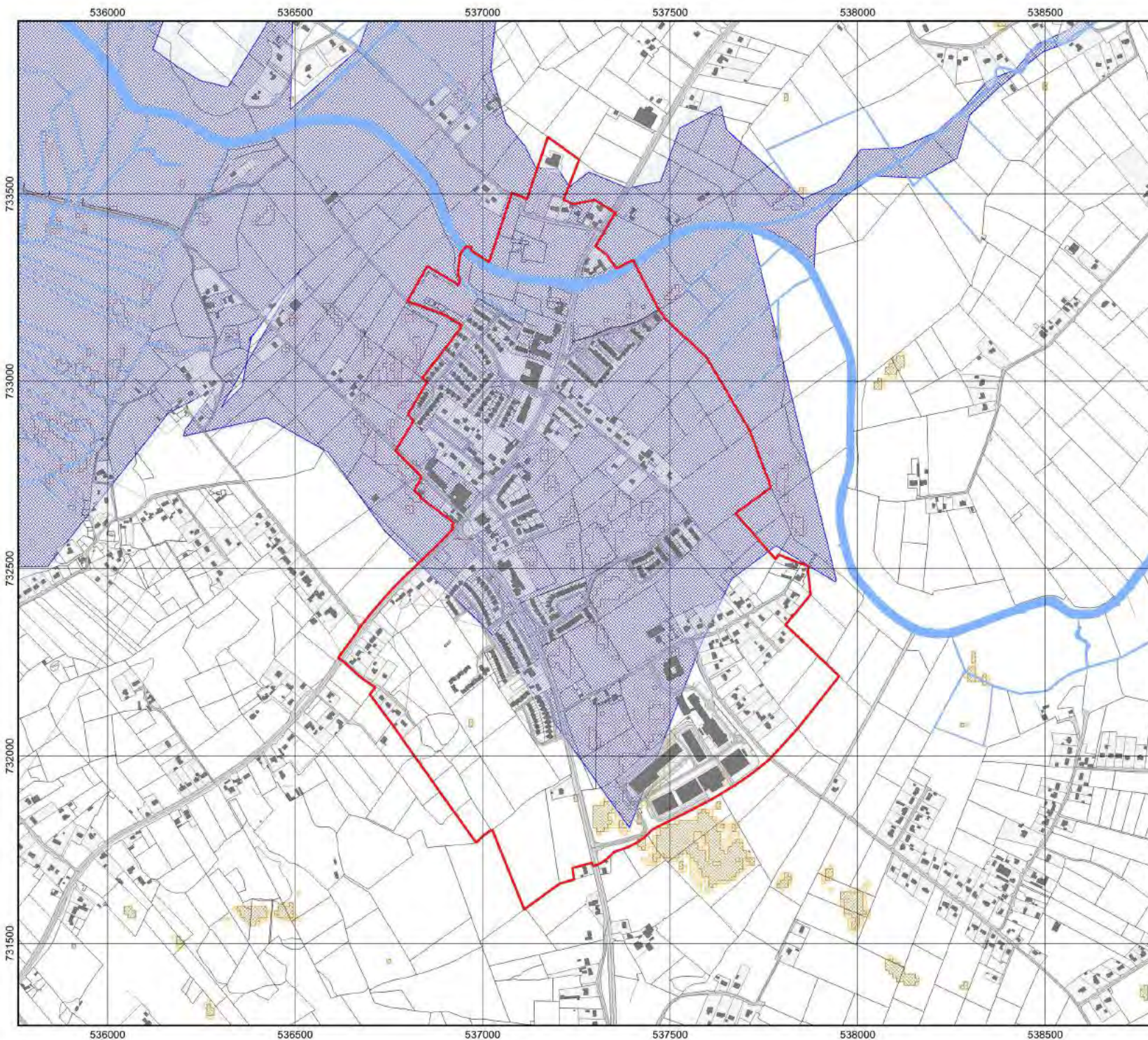
- Land Commission**
-  Benefited Land

- Past Flood Event**
-  Single Flood Event
-  Recurring Flood Event
-  Past Flood Extent

- Galway County Council
Historical Flood Data**
-  Flood Points 2009
-  Road Closures 2009
-  Flooded Houses Dec 2015
-  Flooded Roads Dec 2015
-  GCC Floods 09 Combined Sources



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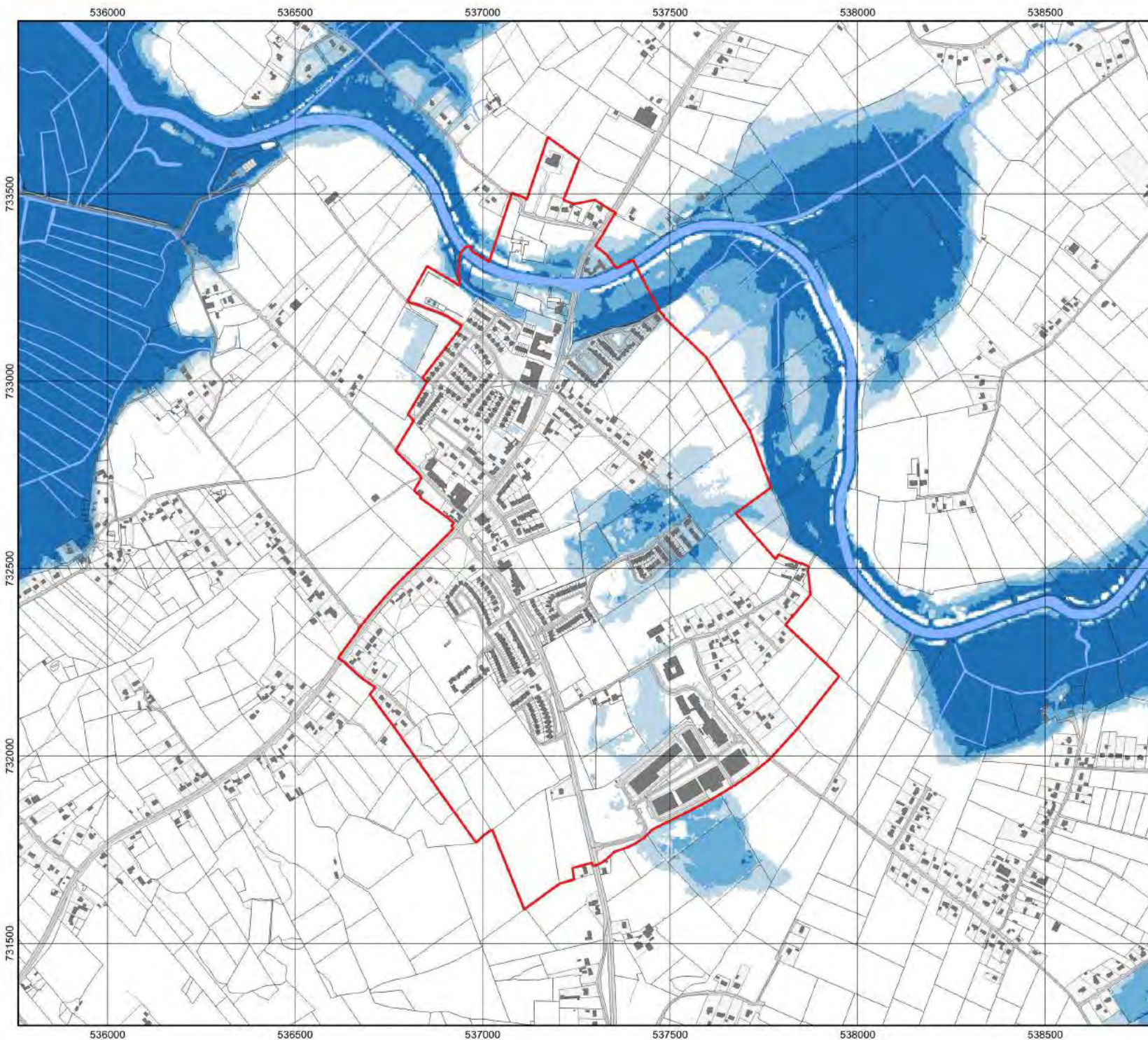


**Galway CDP 2022-2028
SFRA
Baile Chláir
OPW Preliminary Flood Risk
Assessment (PFRA)**





-  Administrative Area
 -  Settlement Boundary
 -  River or Stream
 -  Water
- PFRA Fluvial**
-  PFRA Fluvial 1% AEP
 -  PFRA Fluvial 0.1% AEP
- PFRA Pluvial**
-  PFRA Pluvial 1% AEP
 -  PFRA Pluvial 0.1% AEP
- PFRA Coastal**
-  PFRA ICPS Coastal 0.5% AEP
 -  PFRA ICPS Coastal 0.1% AEP






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**Galway CDP 2022-2028
SFRA**
Baile Chláir
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario

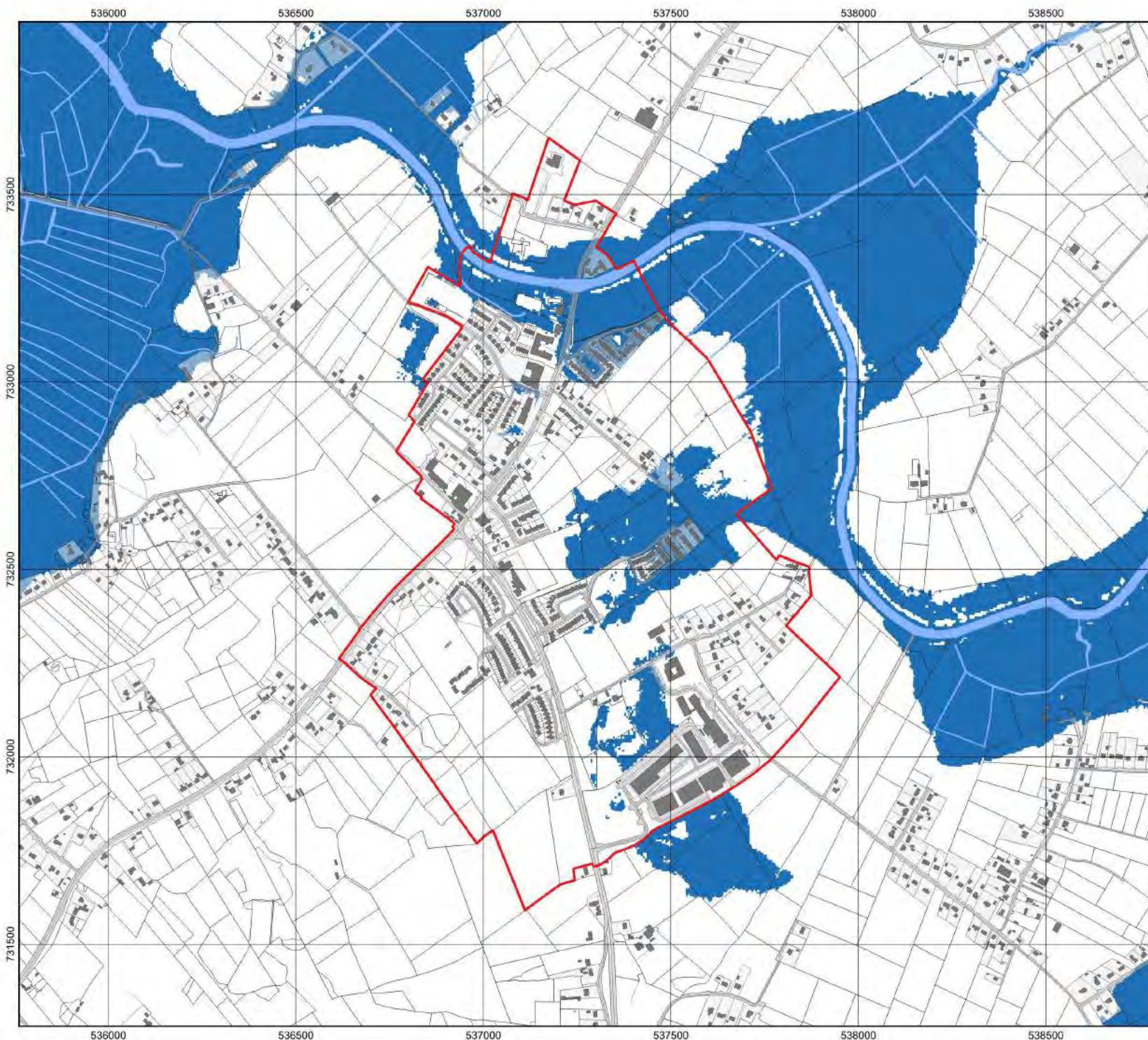
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
Present Day Scenario**





-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent






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**Galway CDP 2022-2028
SFRA**
Baile Chláir
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

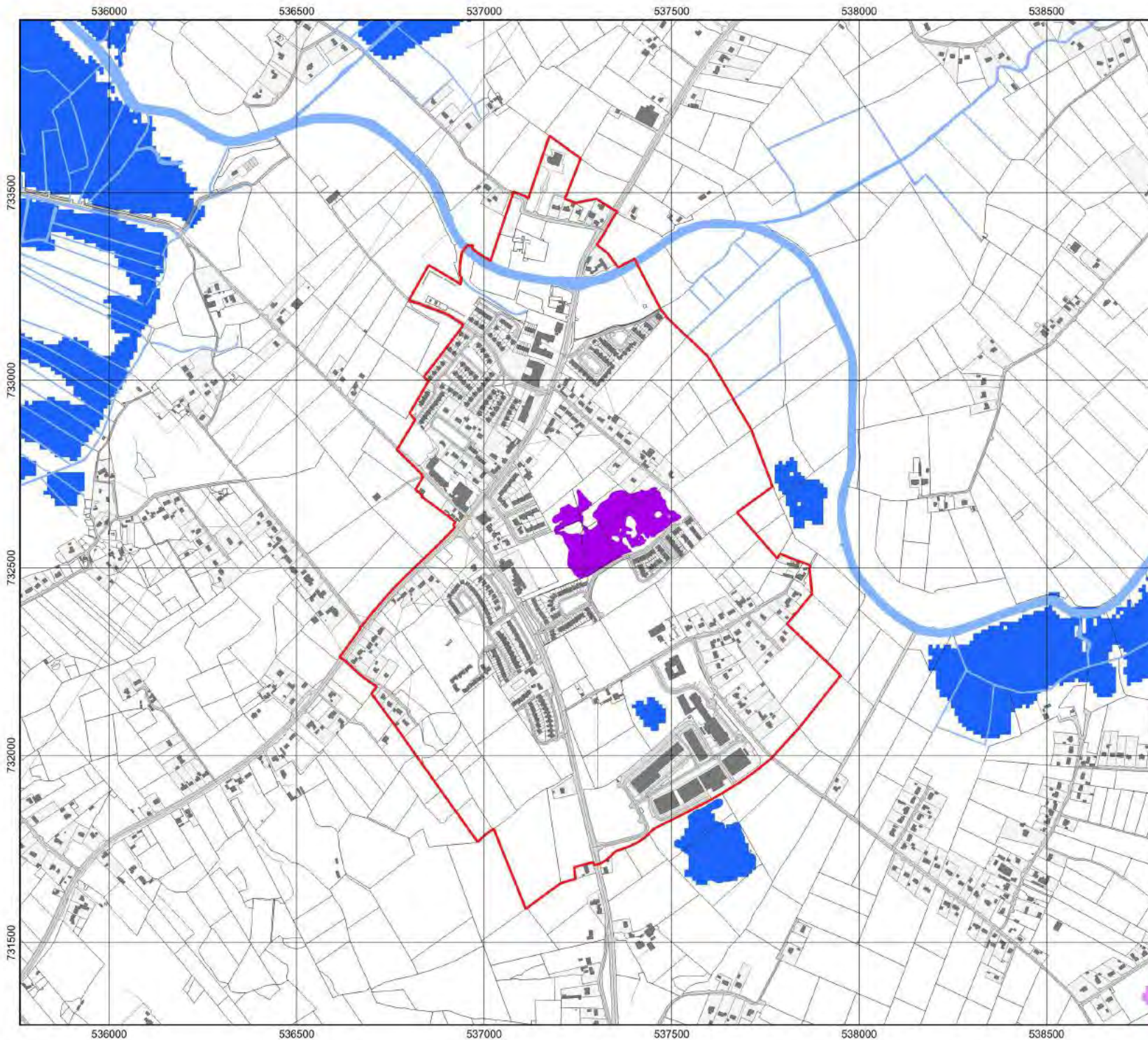
**CFRAM Fluvial and/or Coastal
All Scenarios**

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP



 **Comhairle Chontae na Gaillimhe
Galway County Council**



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**Galway CDP 2022-2028
SFRA
Baile Chláir
GSI Historical Flood Data and
Groundwater Predictive Modeling**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



**GSI Groundwater Flooding
Predictive Model**

-  High Probability
-  Medium Probability
-  Low Probability

GSI Historical Flood Data

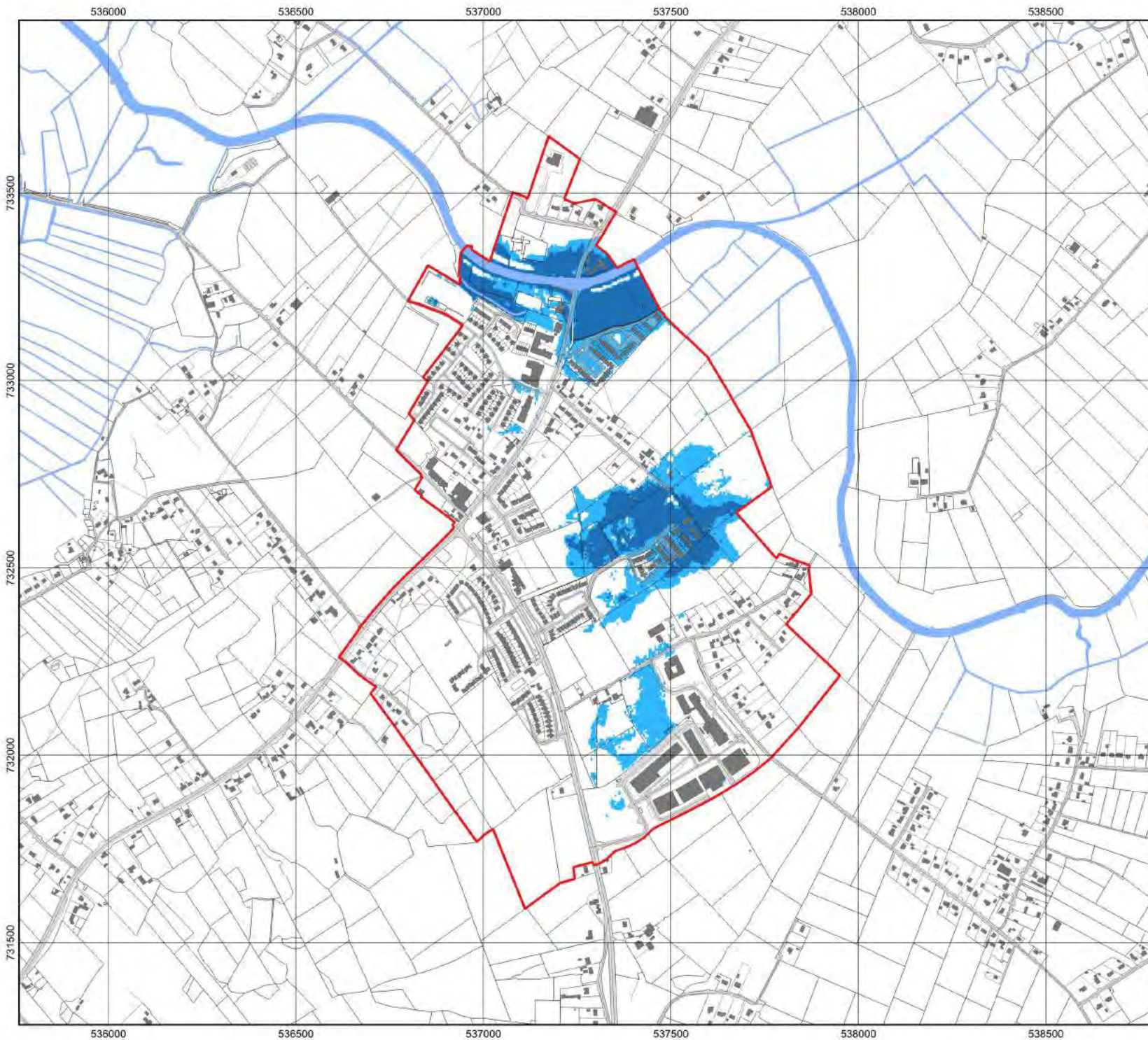
-  Winter 2015-2016
Surface Water Flooding

**Maximum Historic Groundwater
Flooding**

-  Groundwater
-  Groundwater/Surface water



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**Galway CDP 2022-2028
SFRA
Baile Chláir
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

Indicative Flood Zones

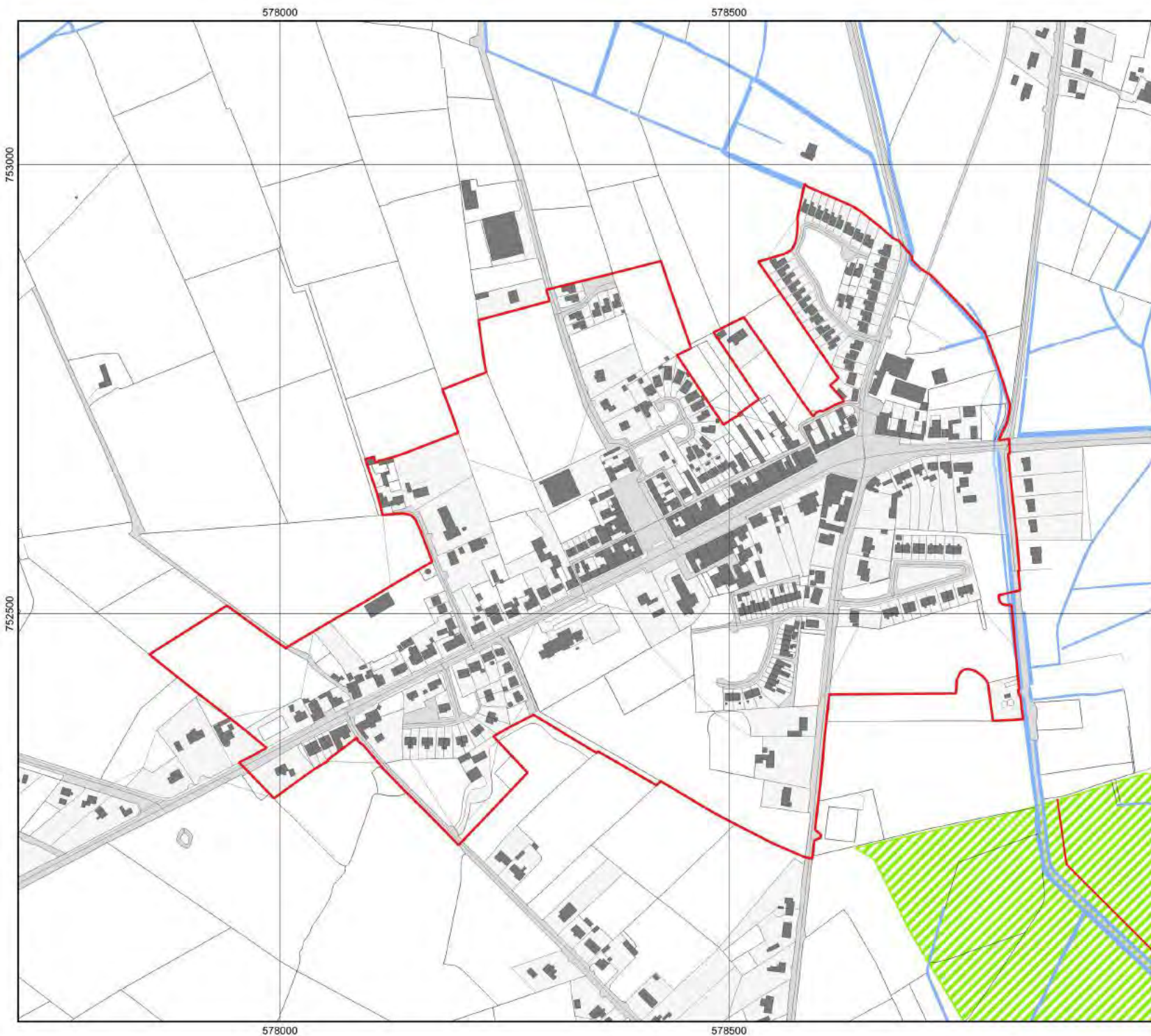
-  Flood Zone A
-  Flood Zone B

Other Zones

-  Possible Turlough
-  Wet lands, not easily drained



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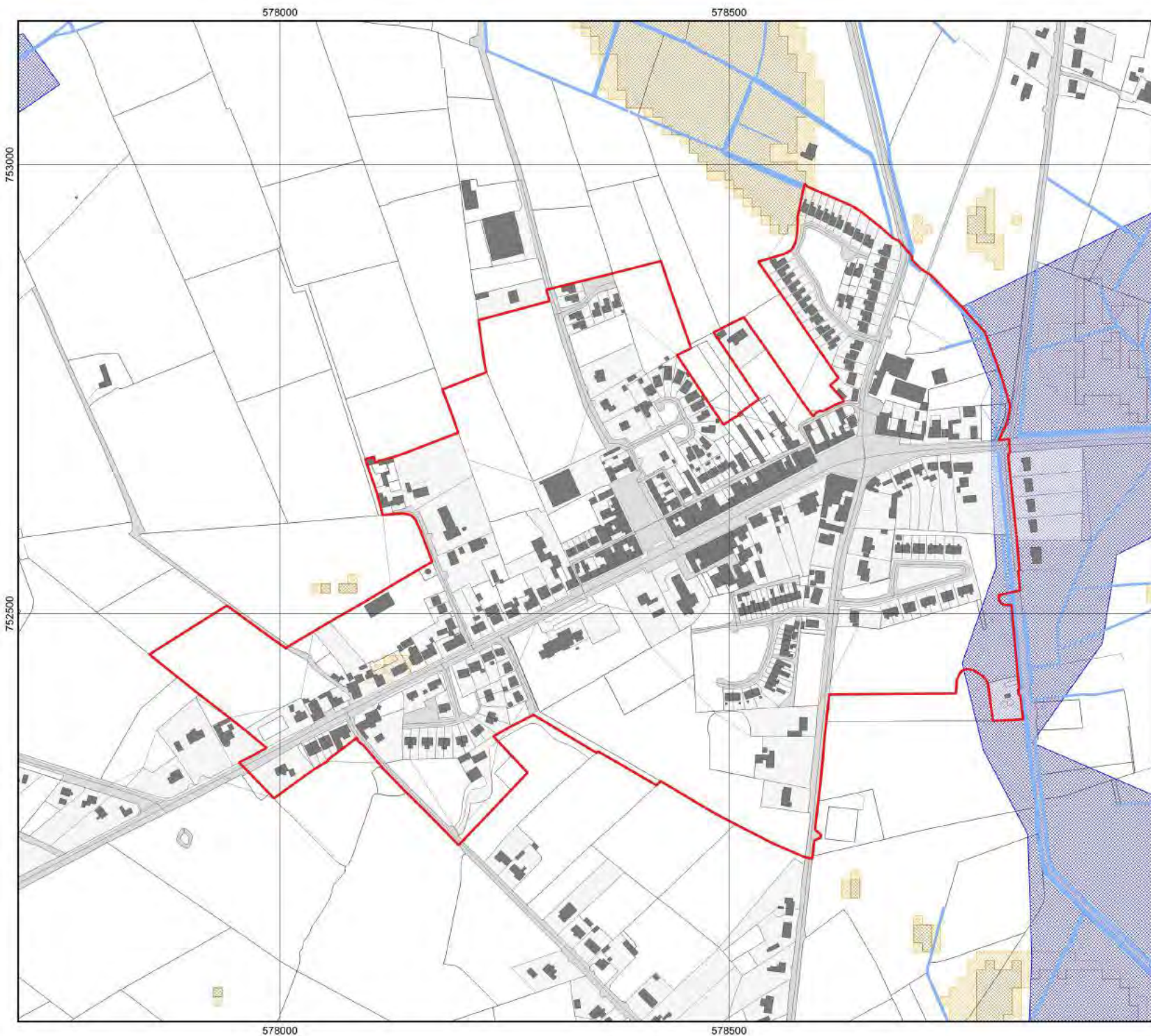
**Galway CDP 2022-2028
SFRA
Ballygar
OPW & GCC Historical Indicators**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water
- Arterial Drainage Scheme**
 - Channel
 - Embankment
 - Benefited Land
- Drainage Districts**
 - Channel
 - Embankment
 - Benefited Land
- Land Commission**
 - Benefited Land
- Past Flood Event**
 - Single Flood Event
 - Recurring Flood Event
 - Past Flood Extent
- Galway County Council
Historical Flood Data**
 - Flood Points 2009
 - Road Closures 2009
 - Flooded Houses Dec 2015
 - Flooded Roads Dec 2015
 - GCC Floods 09 Combined Sources



 **Comhairle Chontae na Gaillimhe
Galway County Council**

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**Galway CDP 2022-2028
SFRA
Ballygar
OPW Preliminary Flood Risk
Assessment (PFRA)**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

- PFRA Fluvial**
-  PFRA Fluvial 1% AEP
-  PFRA Fluvial 0.1% AEP

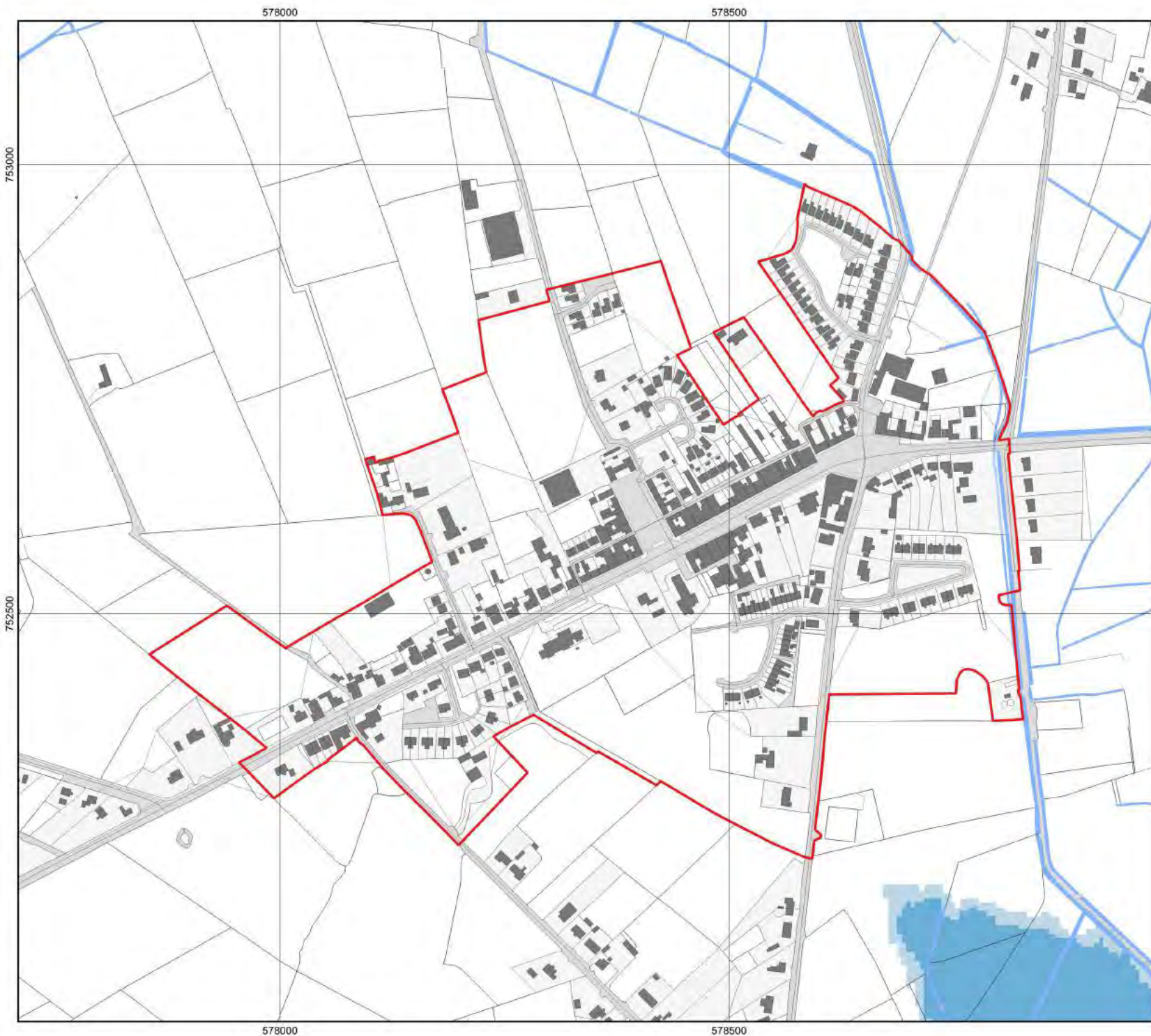
- PFRA Pluvial**
-  PFRA Pluvial 1% AEP
-  PFRA Pluvial 0.1% AEP

- PFRA Coastal**
-  PFRA ICPSS Coastal 0.5% AEP
-  PFRA ICPSS Coastal 0.1% AEP



 **Comhairle Chontae na Gaillimhe
Galway County Council**




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**Galway CDP 2022-2028
SFRA
Ballygar
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario**

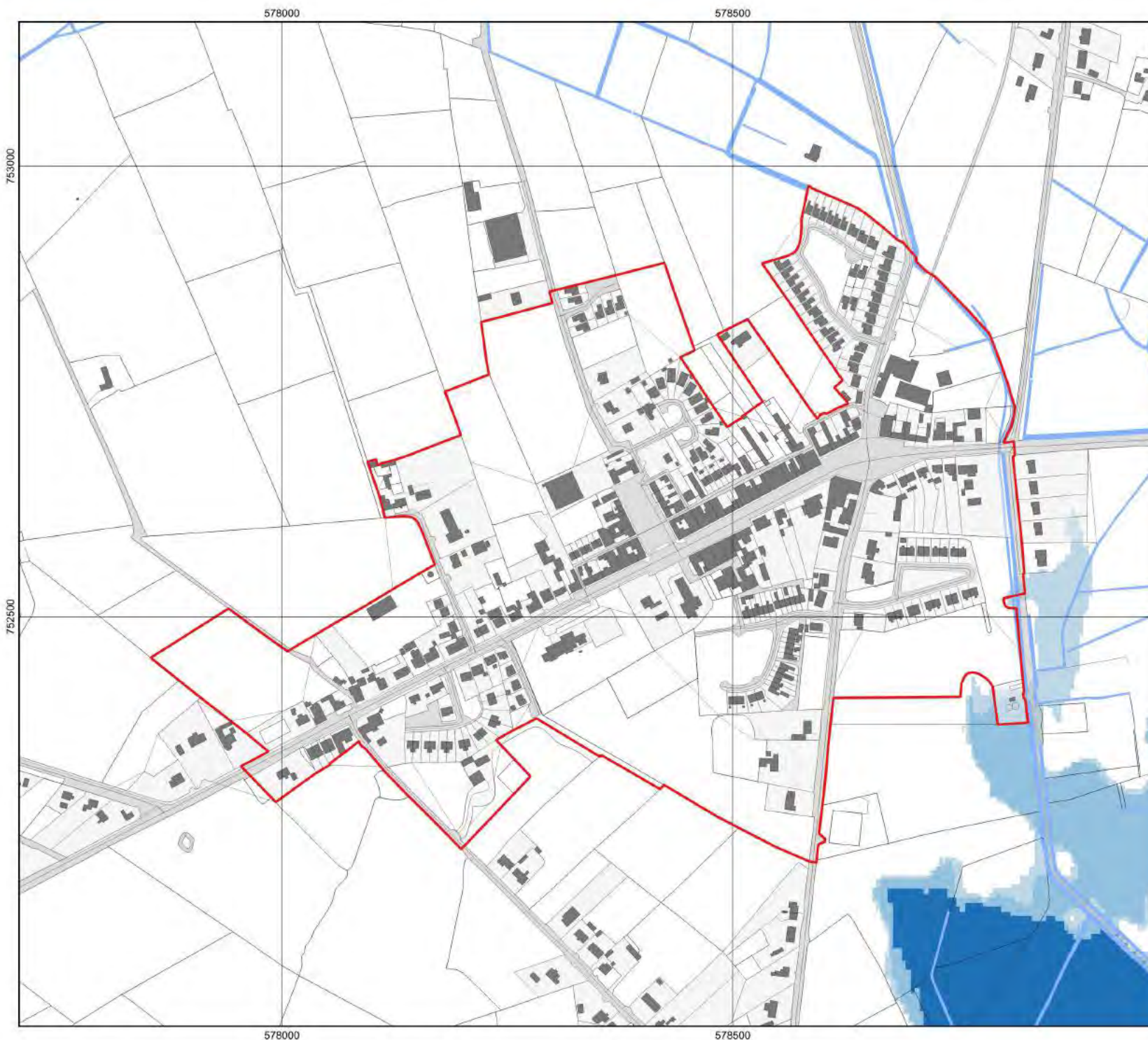
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

***CFRAM Fluvial and/or Coastal
Present Day Scenario***





-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent






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**Galway CDP 2022-2028
SFRA
Ballygar
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios**

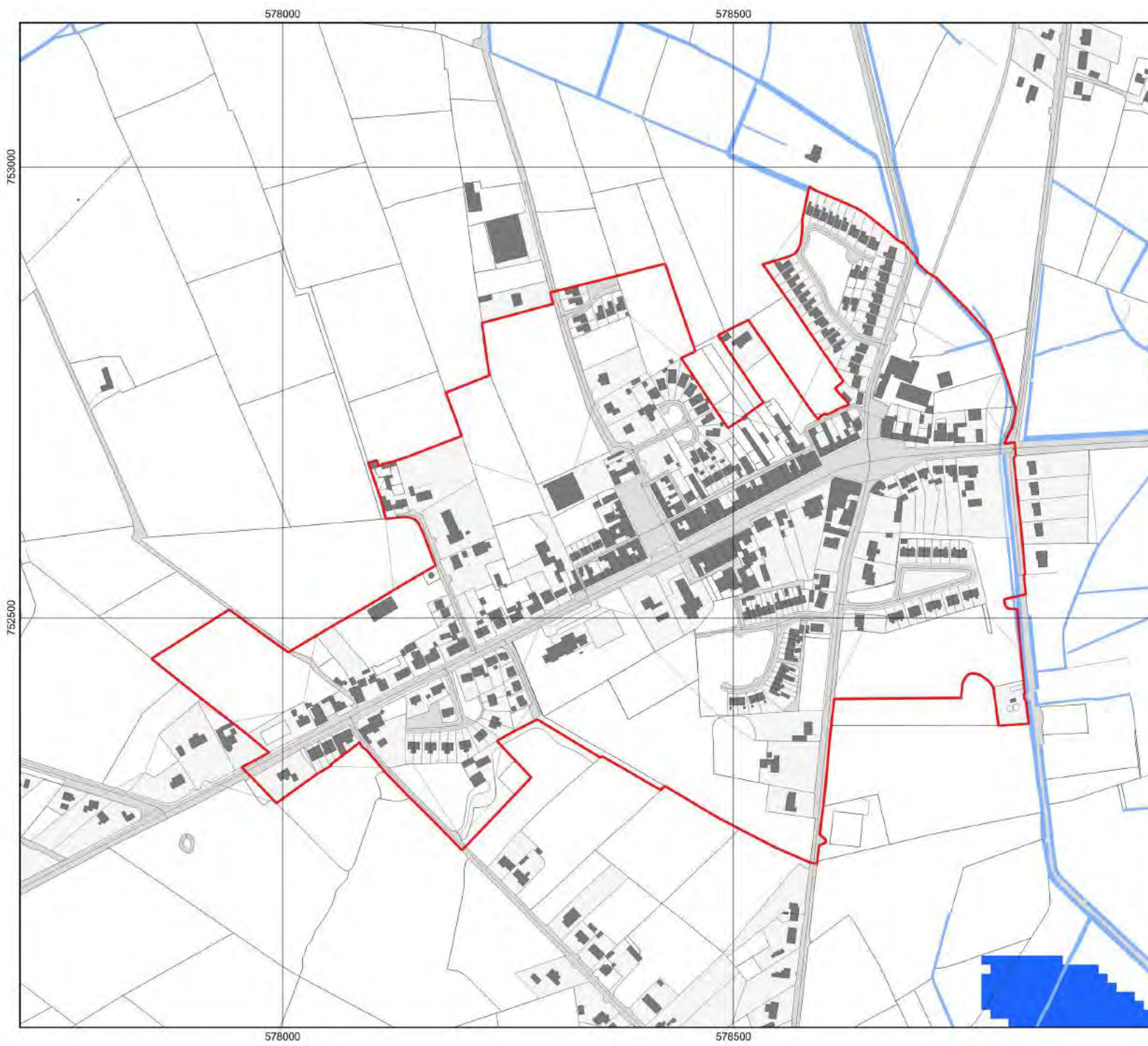
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

***CFRAM Fluvial and/or Coastal
All Scenarios***

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP



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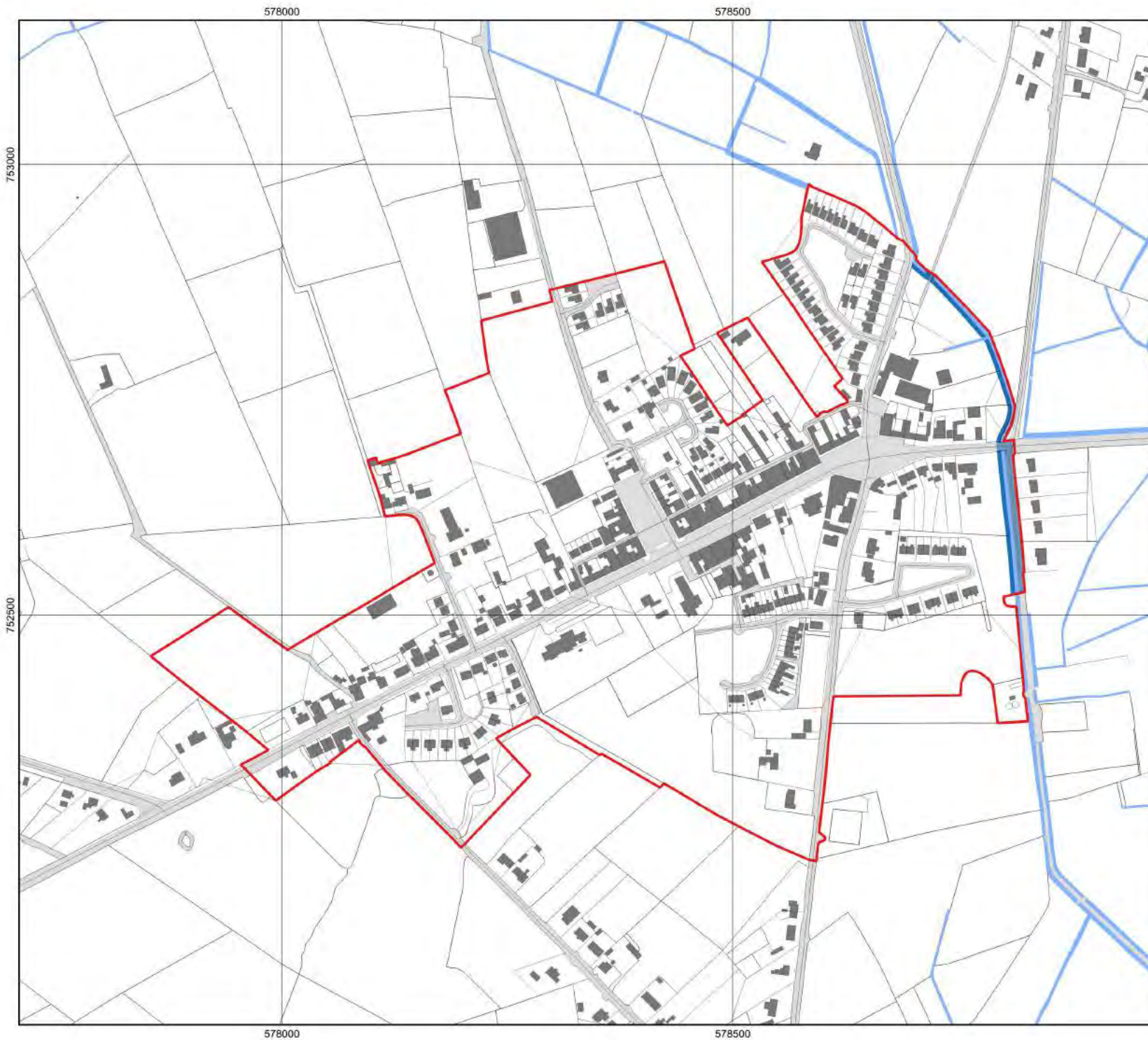
**Galway CDP 2022-2028
SFRA
Ballygar
GSI Historical Flood Data and
Groundwater Predictive Modeling**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water
- GSI Groundwater Flooding Predictive Model**
- High Probability
- Medium Probability
- Low Probability
- GSI Historical Flood Data**
- Winter 2015-2016 Surface Water Flooding
- Maximum Historic Groundwater Flooding**
- Groundwater
- Groundwater/Surface water



**Comhairle Chontae na Gaillimhe
Galway County Council**

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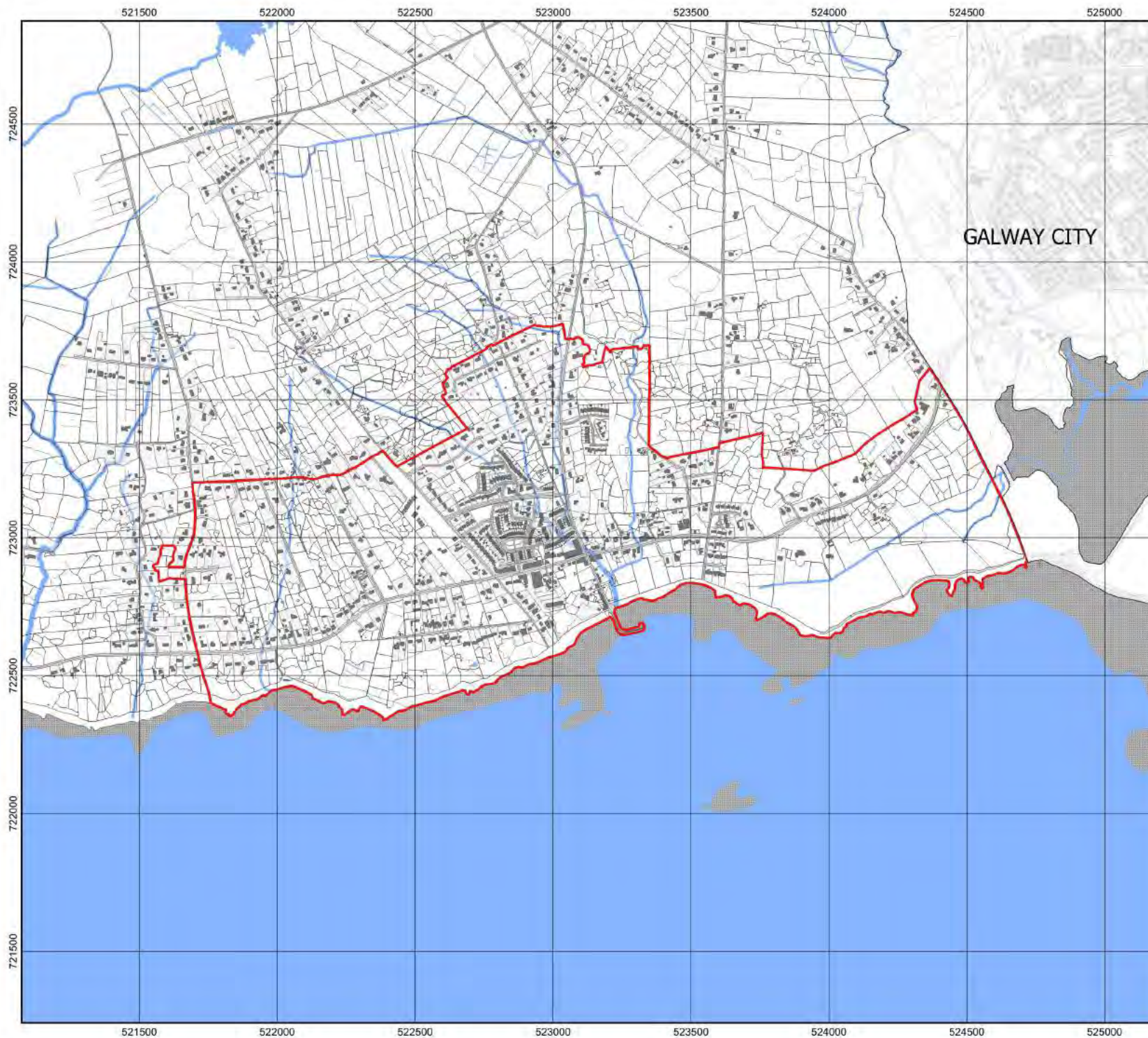
**Galway CDP 2022-2028
SFRA
Ballygar
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water
- Indicative Flood Zones**
-  Flood Zone A
-  Flood Zone B
- Other Zones**
-  Possible Turlough
-  Wet lands, not easily drained



 **Comhairle Chontae na Gaillimhe
Galway County Council**

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**Galway CDP 2022-2028
SFRA
Bearna
OPW & GCC Historical Indicators**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water

Arterial Drainage Scheme

- Channel
- Embankment
- Benefited Land

Drainage Districts

- Channel
- Embankment
- Benefited Land

Land Commission

- Benefited Land

Past Flood Event

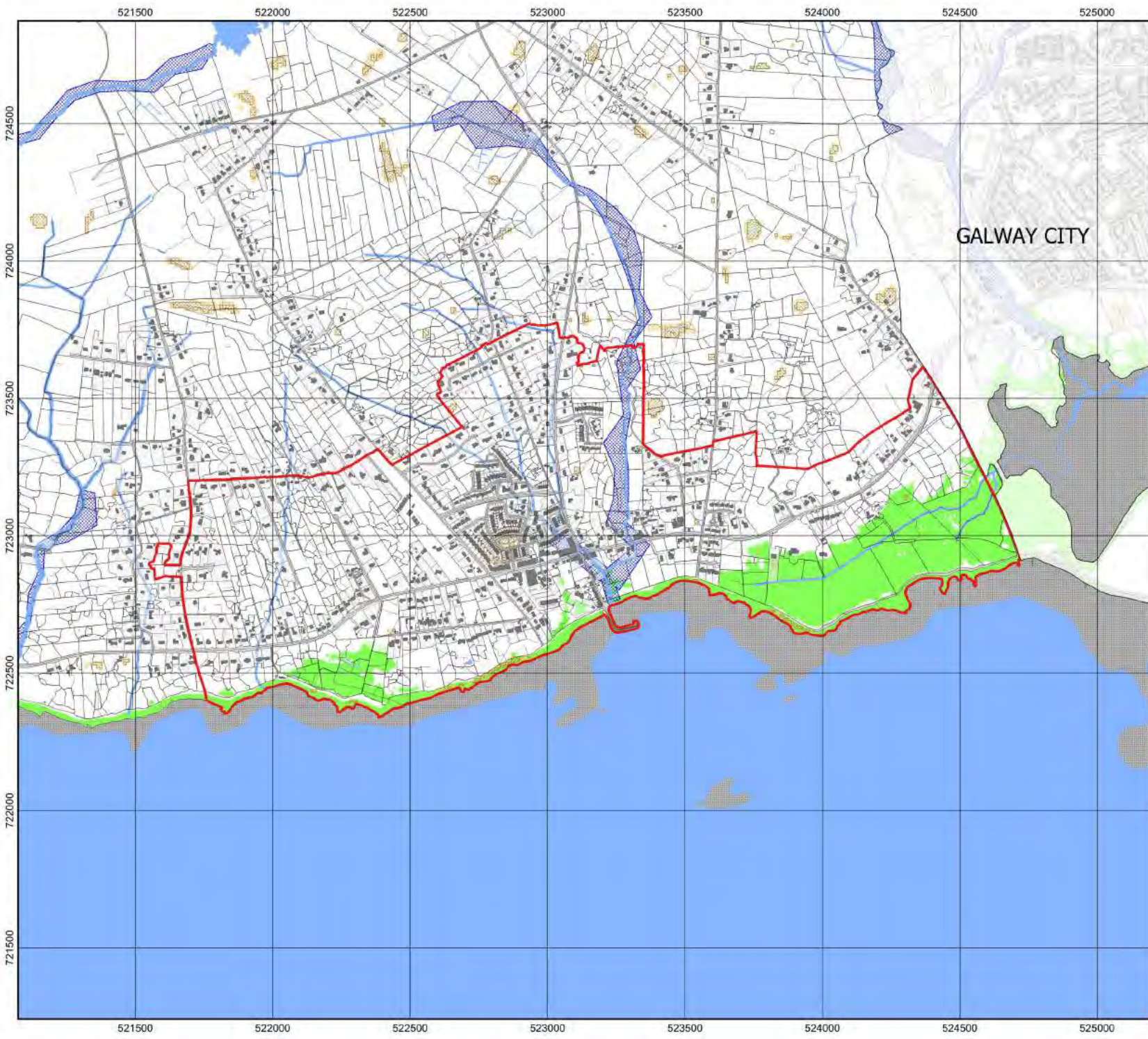
- Single Flood Event
- Recurring Flood Event
- Past Flood Extent

**Galway County Council
Historical Flood Data**

- Flood Points 2009
- Road Closures 2009
- Flooded Houses Dec 2015
- Flooded Roads Dec 2015
- GCC Floods 09 Combined Sources




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**Galway CDP 2022-2028
SFRA
Berna
OPW Preliminary Flood Risk
Assessment (PFRA)**

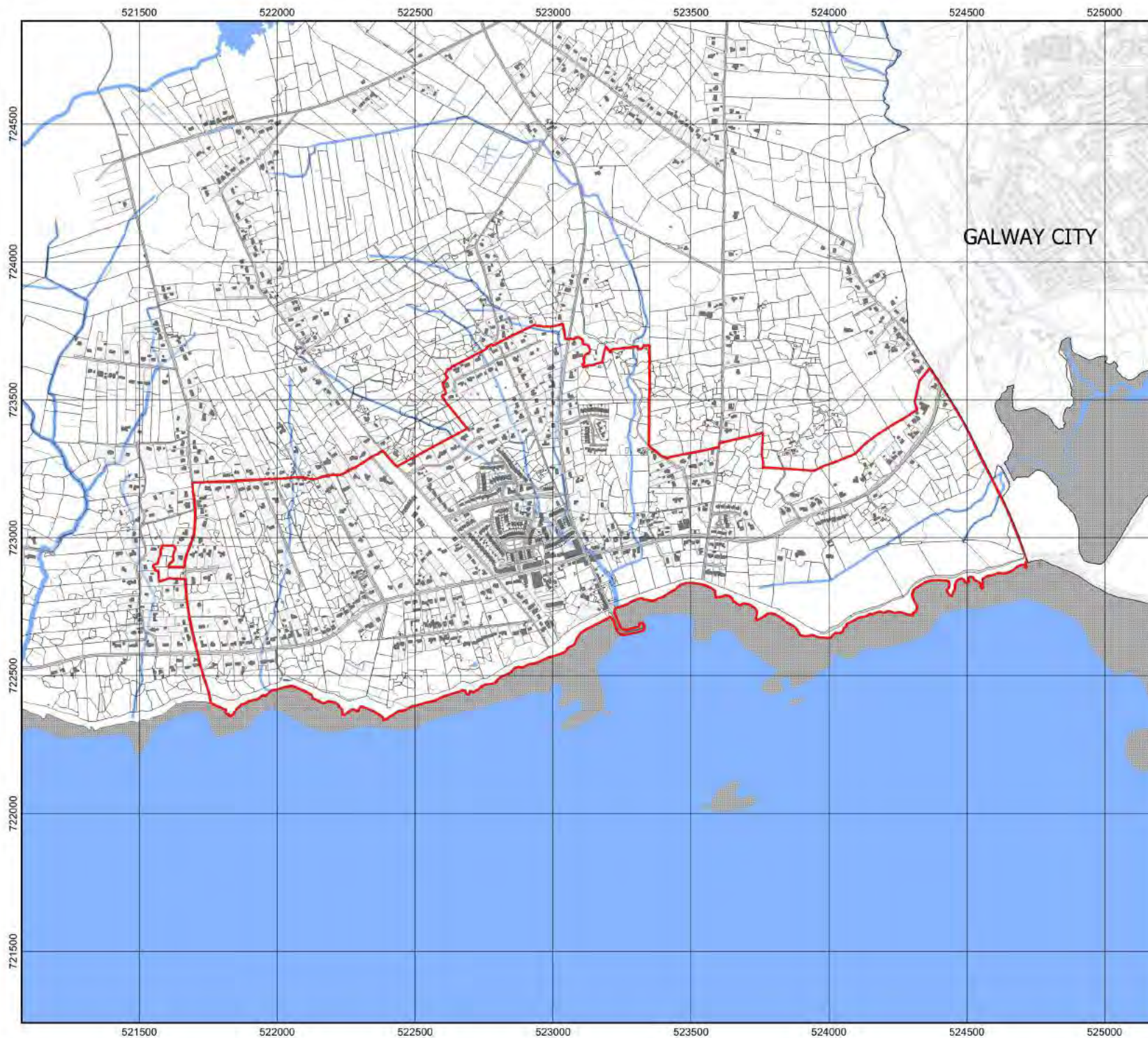
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

- PFRA Fluvial**
-  PFRA Fluvial 1% AEP
 -  PFRA Fluvial 0.1% AEP

- PFRA Pluvial**
-  PFRA Pluvial 1% AEP
 -  PFRA Pluvial 0.1% AEP

- PFRA Coastal**
-  PFRA ICPSS Coastal 0.5% AEP
 -  PFRA ICPSS Coastal 0.1% AEP








Galway CDP 2022-2028

SFRA

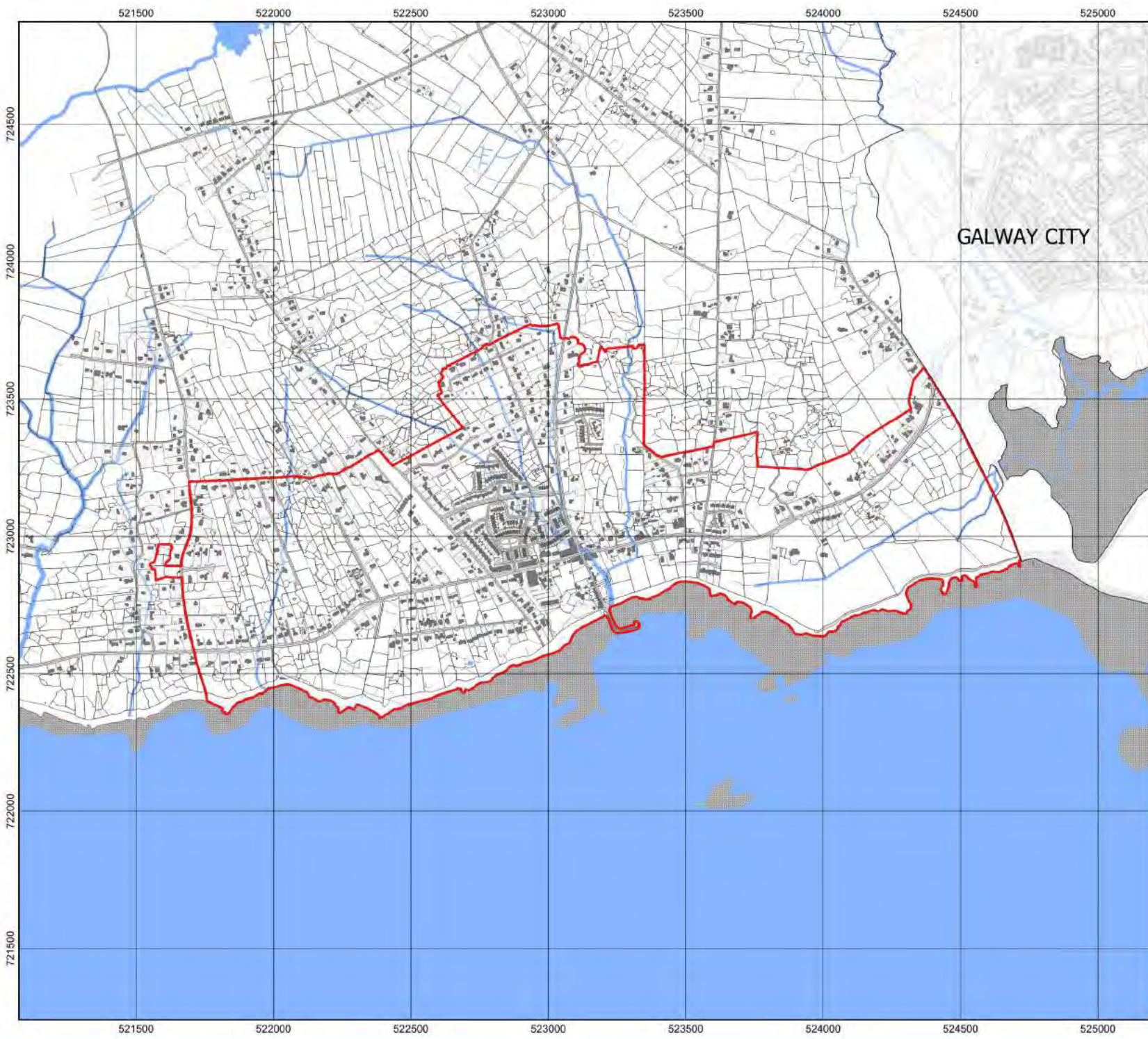
Bearna
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water





CFRAM Fluvial and/or Coastal
Present Day Scenario

-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent








**Galway CDP 2022-2028
SFRA
Bearna
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

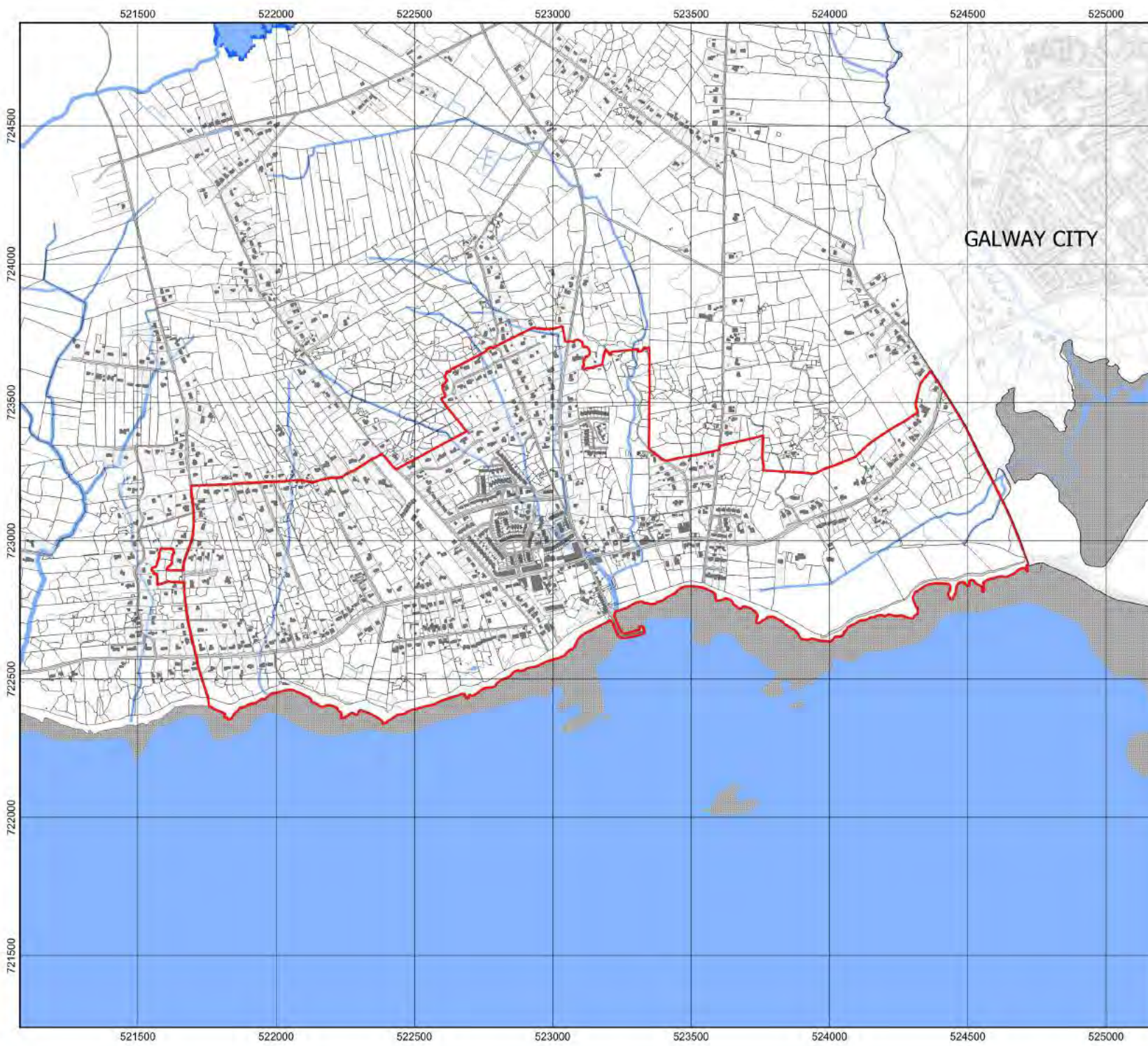
**CFRAM Fluvial and/or Coastal
All Scenarios**

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP

GALWAY CITY



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**Galway CDP 2022-2028
SFRA**
Bearna
**GSI Historical Flood Data and
Groundwater Predictive Modeling**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



**GSI Groundwater Flooding
Predictive Model**

-  High Probability
-  Medium Probability
-  Low Probability

GSI Historical Flood Data

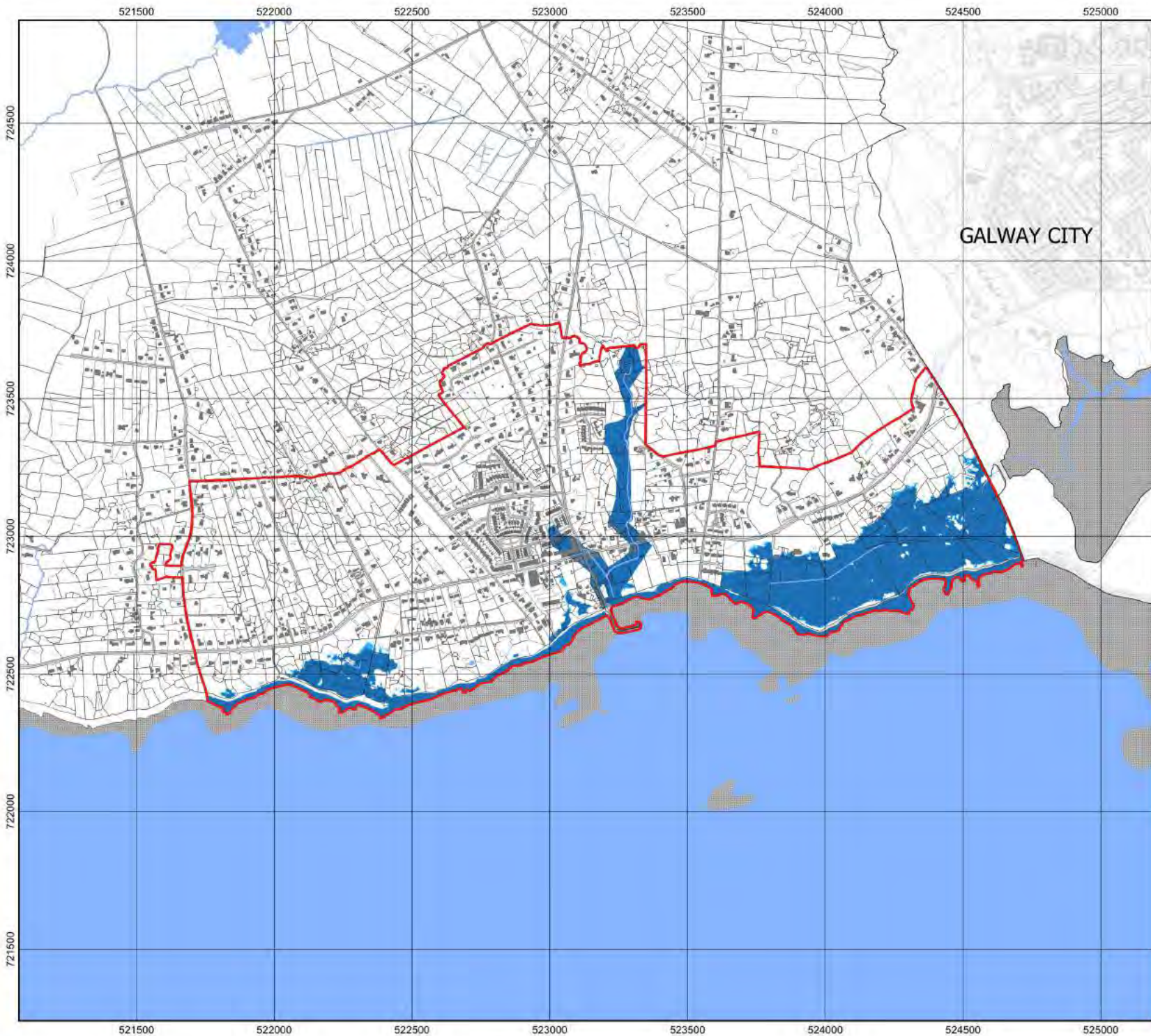
-  Winter 2015-2016
Surface Water Flooding

**Maximum Historic Groundwater
Flooding**

-  Groundwater
-  Groundwater/Surface water



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**Galway CDP 2022-2028
SFRA
Bearna
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

Indicative Flood Zones

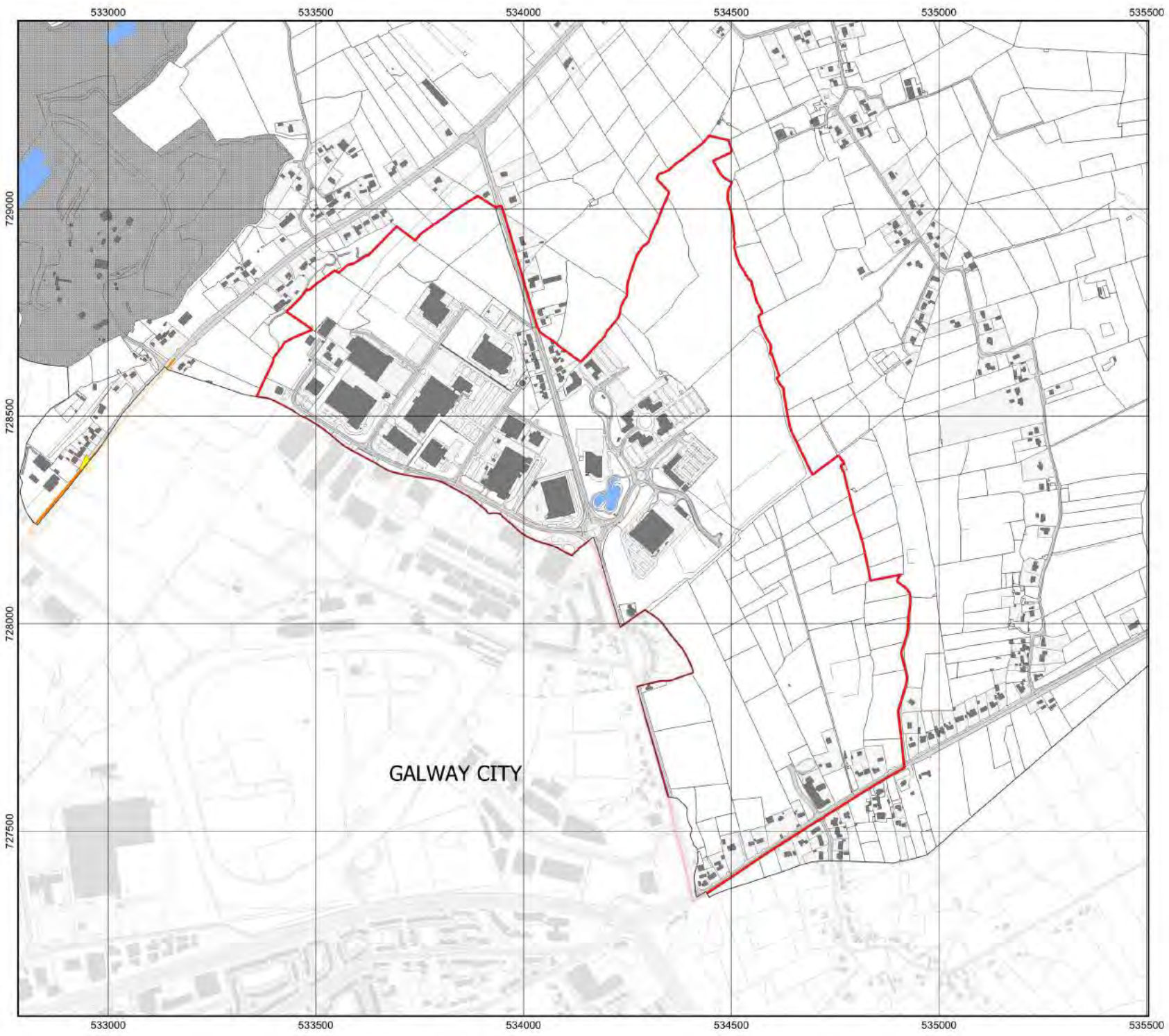
-  Flood Zone A
-  Flood Zone B

Other Zones

-  Possible Turlough
-  Wet lands, not easily drained



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**Galway CDP 2022-2028
SFRA
Briarhill
OPW & GCC Historical Indicators**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

- Arterial Drainage Scheme**
-  Channel
-  Embankment
-  Benefited Land

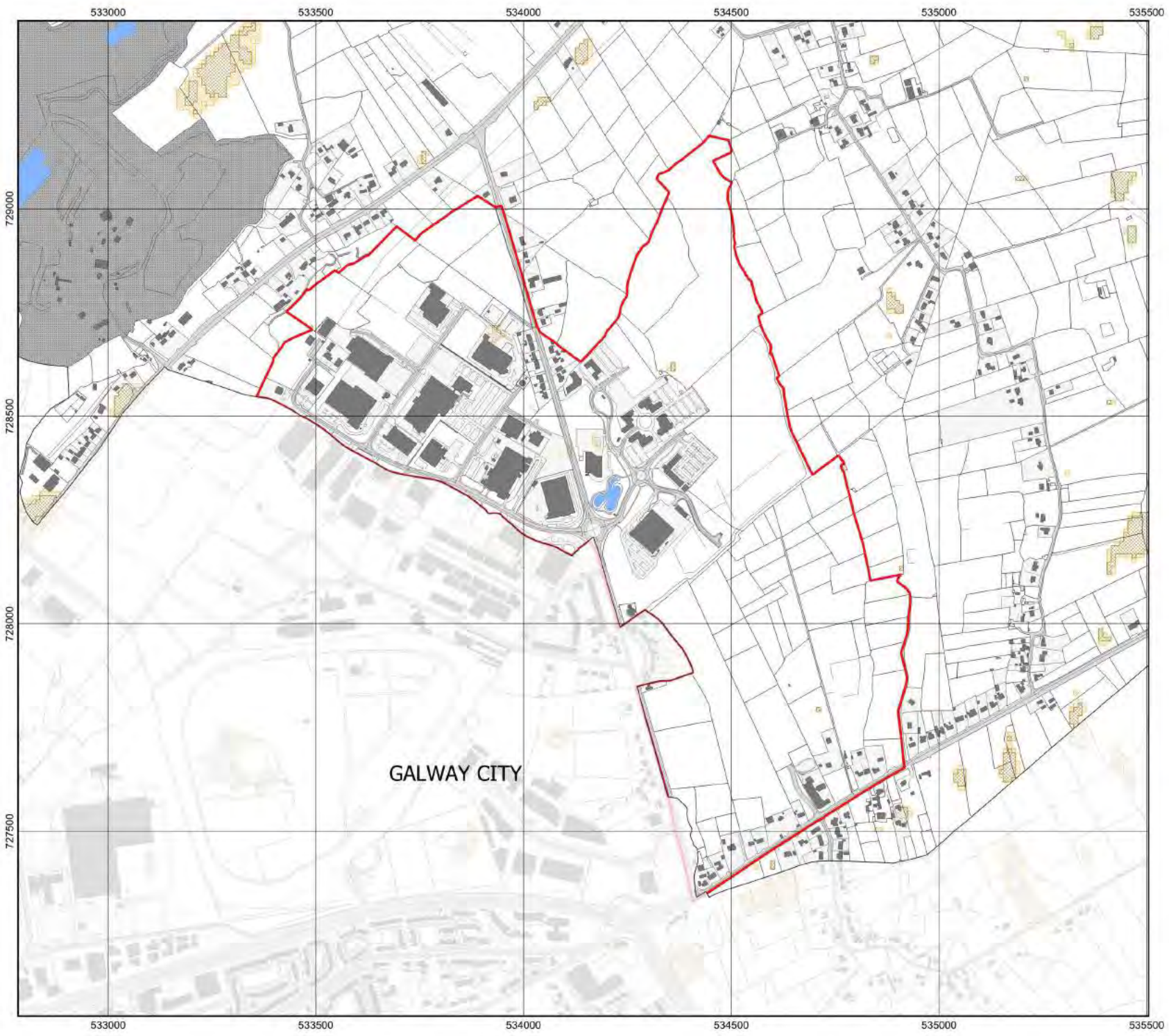
- Drainage Districts**
-  Channel
-  Embankment
-  Benefited Land

- Land Commission**
-  Benefited Land

- Past Flood Event**
-  Single Flood Event
-  Recurring Flood Event
-  Past Flood Extent

- Galway County Council
Historical Flood Data**
-  Flood Points 2009
-  Road Closures 2009
-  Flooded Houses Dec 2015
-  Flooded Roads Dec 2015
-  GCC Floods 09 Combined Sources



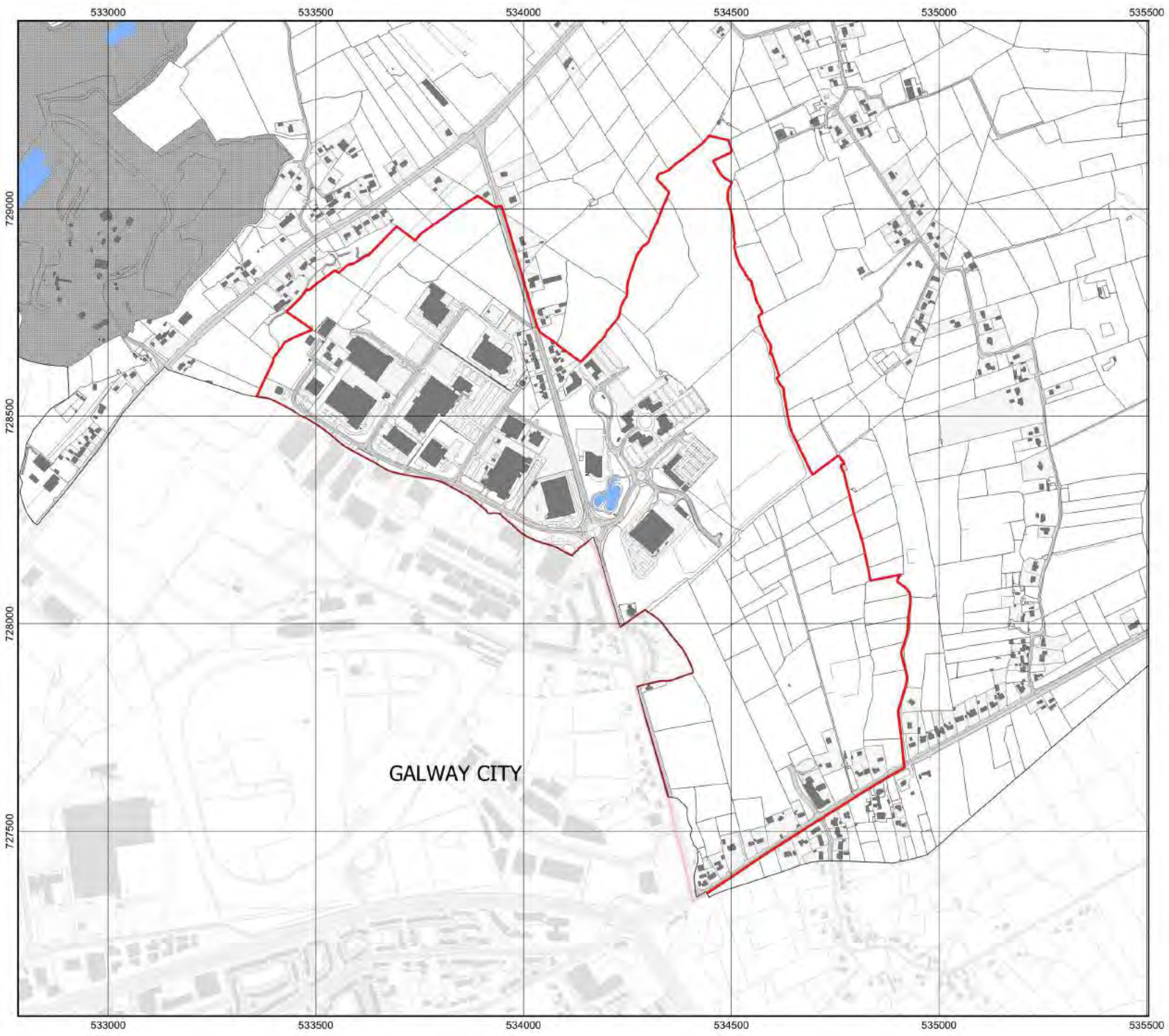


**Galway CDP 2022-2028
SFRA
Briarhill
OPW Preliminary Flood Risk
Assessment (PFRA)**





-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water
- PFRA Fluvial**
 -  PFRA Fluvial 1% AEP
 -  PFRA Fluvial 0.1% AEP
- PFRA Pluvial**
 -  PFRA Pluvial 1% AEP
 -  PFRA Pluvial 0.1% AEP
- PFRA Coastal**
 -  PFRA ICPSS Coastal 0.5% AEP
 -  PFRA ICPSS Coastal 0.1% AEP






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**Galway CDP 2022-2028
SFRA
Briarhill
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario**

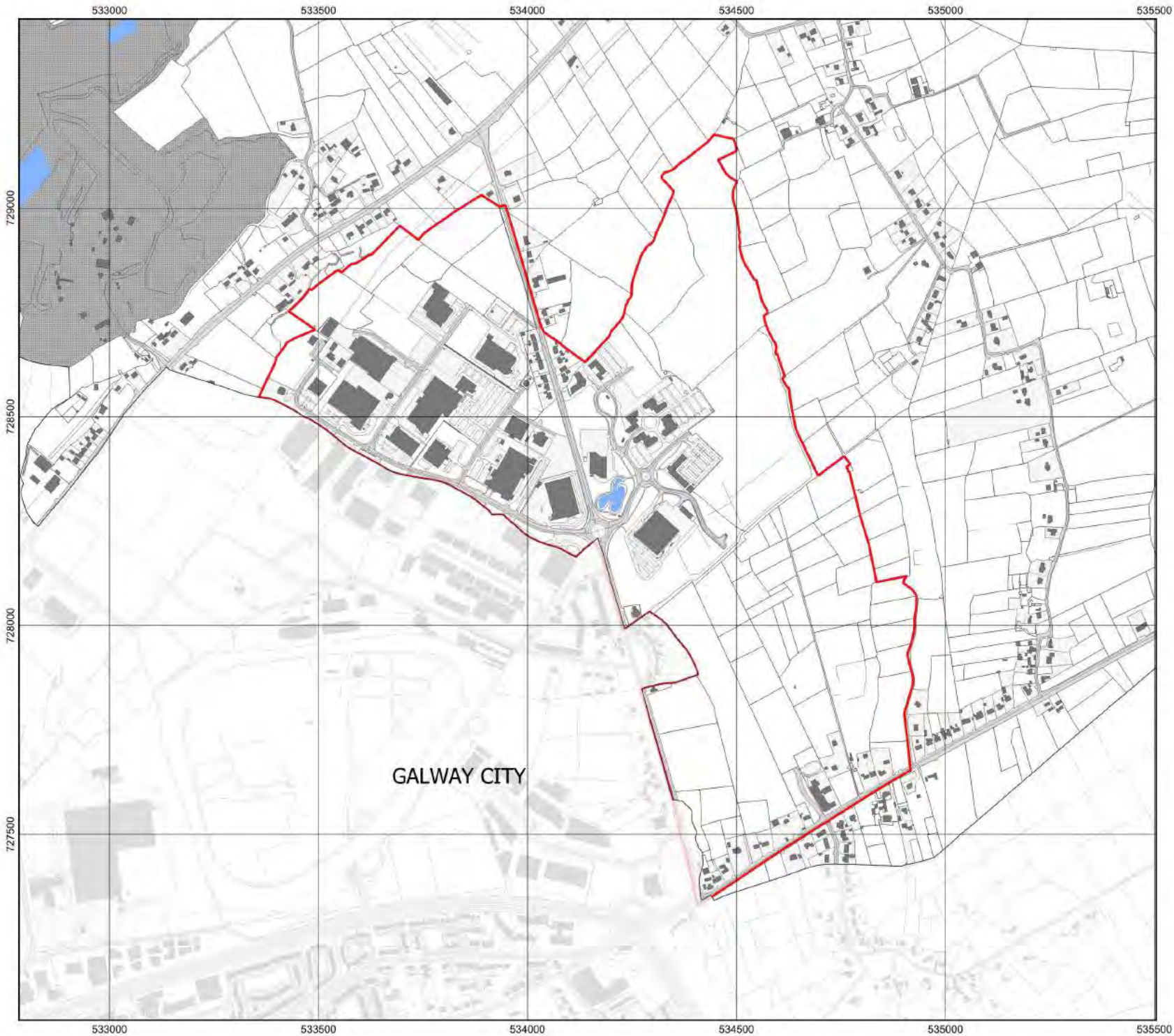
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

***CFRAM Fluvial and/or Coastal
Present Day Scenario***





-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent






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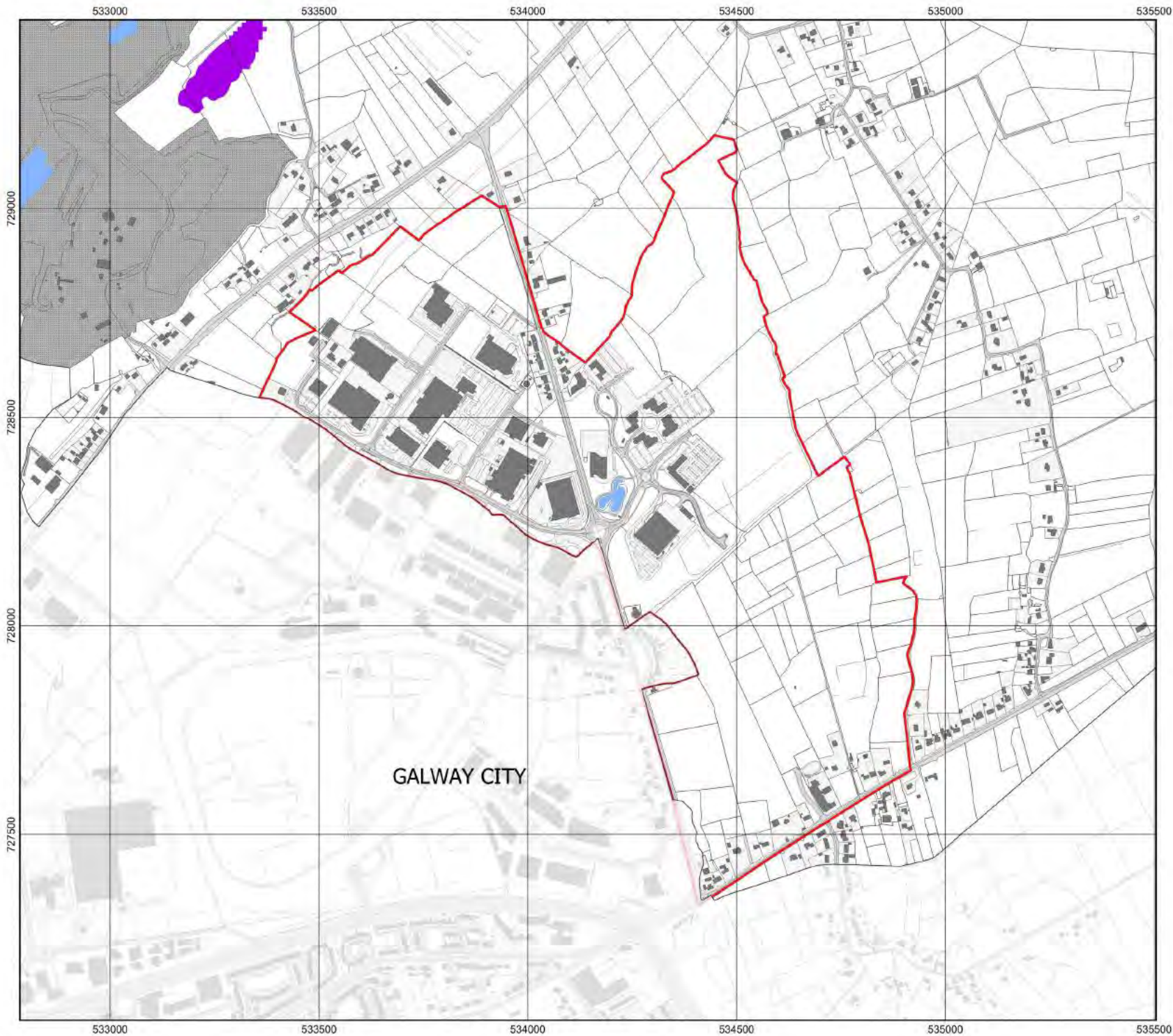
**Galway CDP 2022-2028
SFRA
Briarhill
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
All Scenarios**

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP






**Galway CDP 2022-2028
SFRA
Briarhill
GSI Historical Flood Data and
Groundwater Predictive Modeling**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



**GSI Groundwater Flooding
Predictive Model**

-  High Probability
-  Medium Probability
-  Low Probability

GSI Historical Flood Data

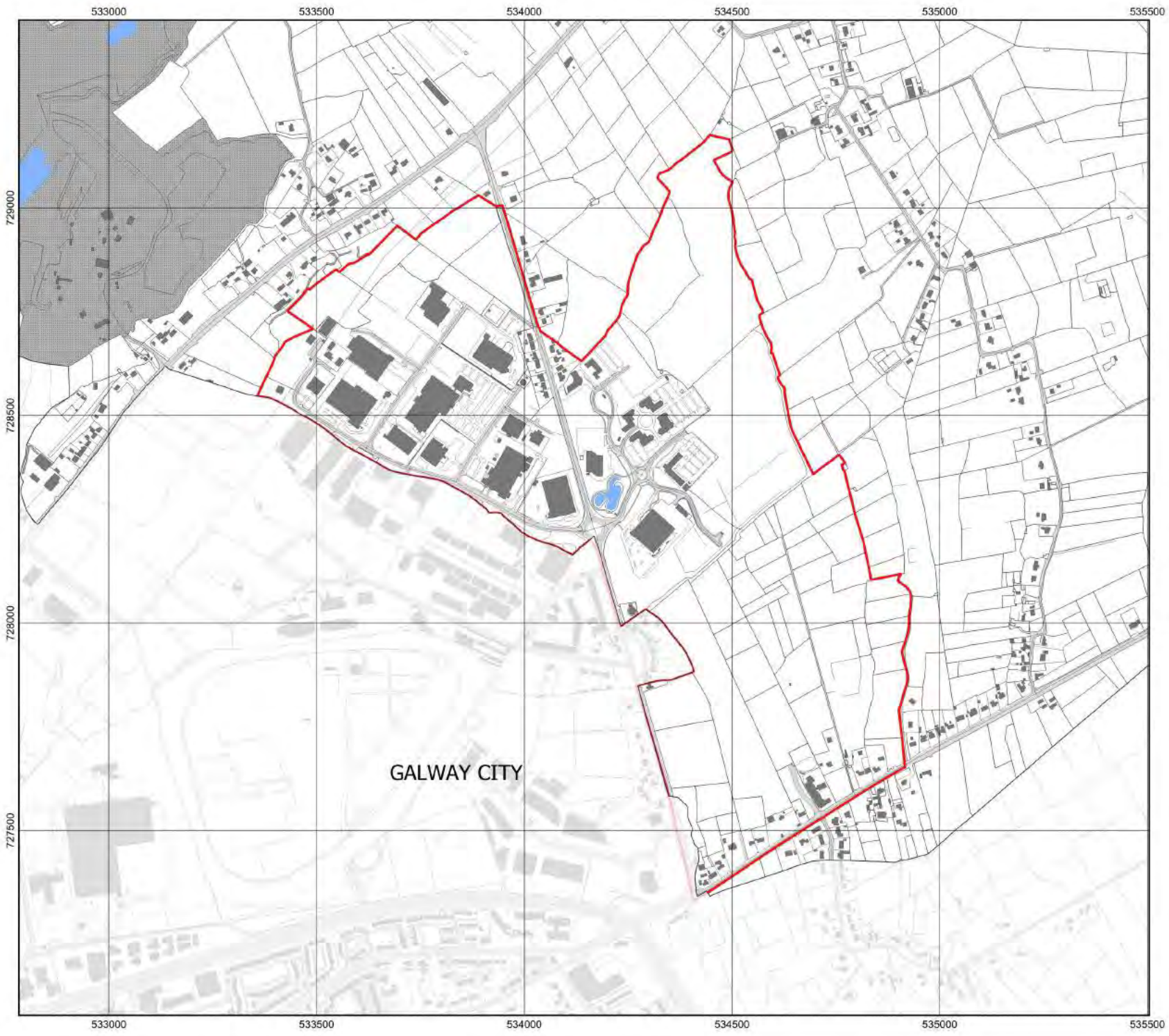
-  Winter 2015-2016
Surface Water Flooding

**Maximum Historic Groundwater
Flooding**

-  Groundwater
-  Groundwater/Surface water



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**Galway CDP 2022-2028
SFRA
Briarhill
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

Indicative Flood Zones

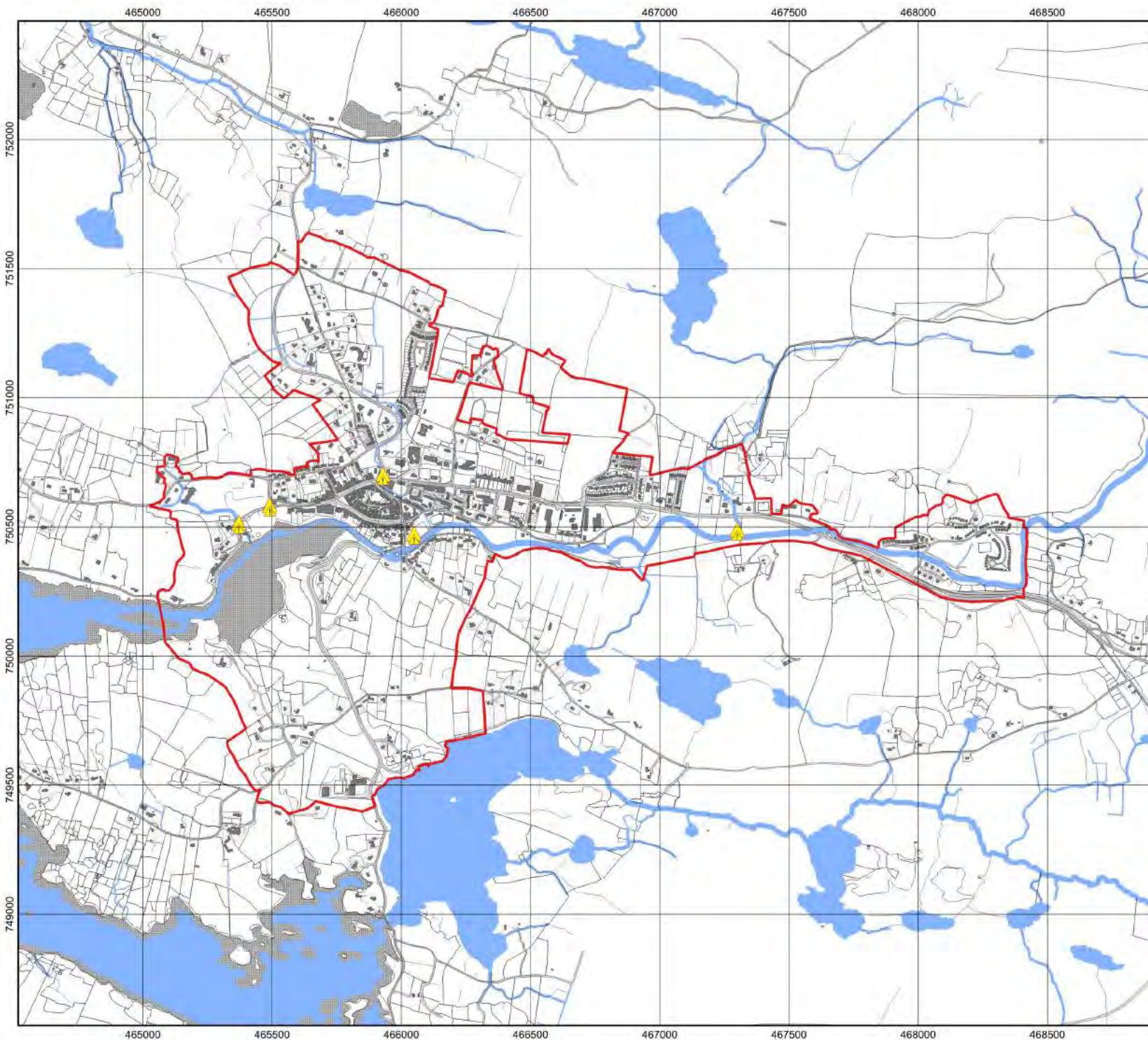
-  Flood Zone A
-  Flood Zone B

Other Zones

-  Possible Turlough
-  Wet lands, not easily drained



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**Galway CDP 2022-2028
SFRA
Clifden
OPW & GCC Historical Indicators**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

- Arterial Drainage Scheme**
-  Channel
-  Embankment
-  Benefited Land

- Drainage Districts**
-  Channel
-  Embankment
-  Benefited Land

- Land Commission**
-  Benefited Land

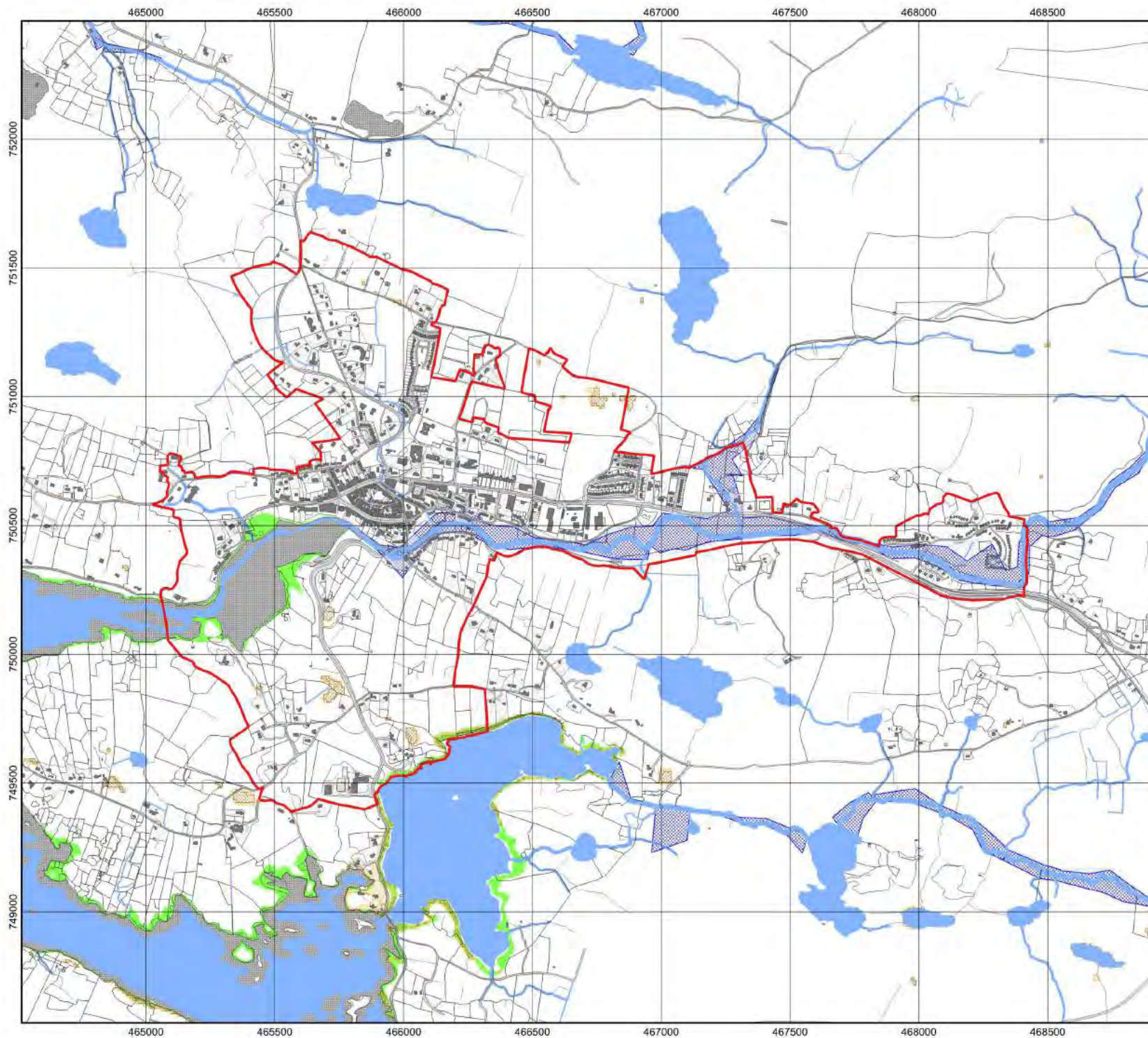
- Past Flood Event**
-  Single Flood Event
-  Recurring Flood Event
-  Past Flood Extent

- Galway County Council
Historical Flood Data**
-  Flood Points 2009
-  Road Closures 2009
-  Flooded Houses Dec 2015
-  Flooded Roads Dec 2015
-  GCC Floods 09 Combined Sources



 **Comhairle Chontae na Gaillimhe
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**Galway CDP 2022-2028
SFRA
Clifden
OPW Preliminary Flood Risk
Assessment (PFRA)**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



PFRA Fluvial

-  PFRA Fluvial 1% AEP
-  PFRA Fluvial 0.1% AEP

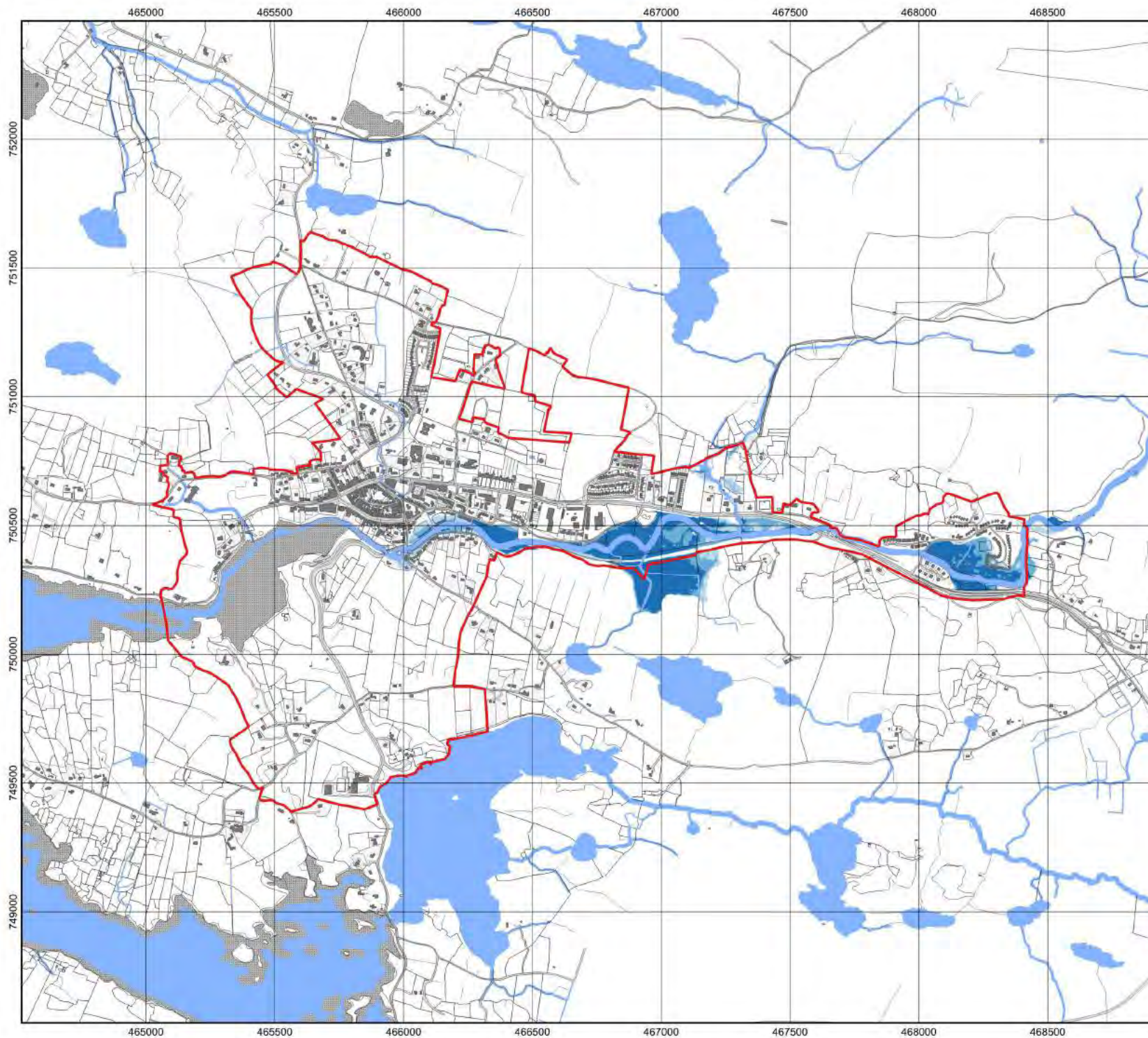
PFRA Pluvial

-  PFRA Pluvial 1% AEP
-  PFRA Pluvial 0.1% AEP


PFRA Coastal

-  PFRA ICPSS Coastal 0.5% AEP
-  PFRA ICPSS Coastal 0.1% AEP








**Galway CDP 2022-2028
SFRA
Clifden
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario**

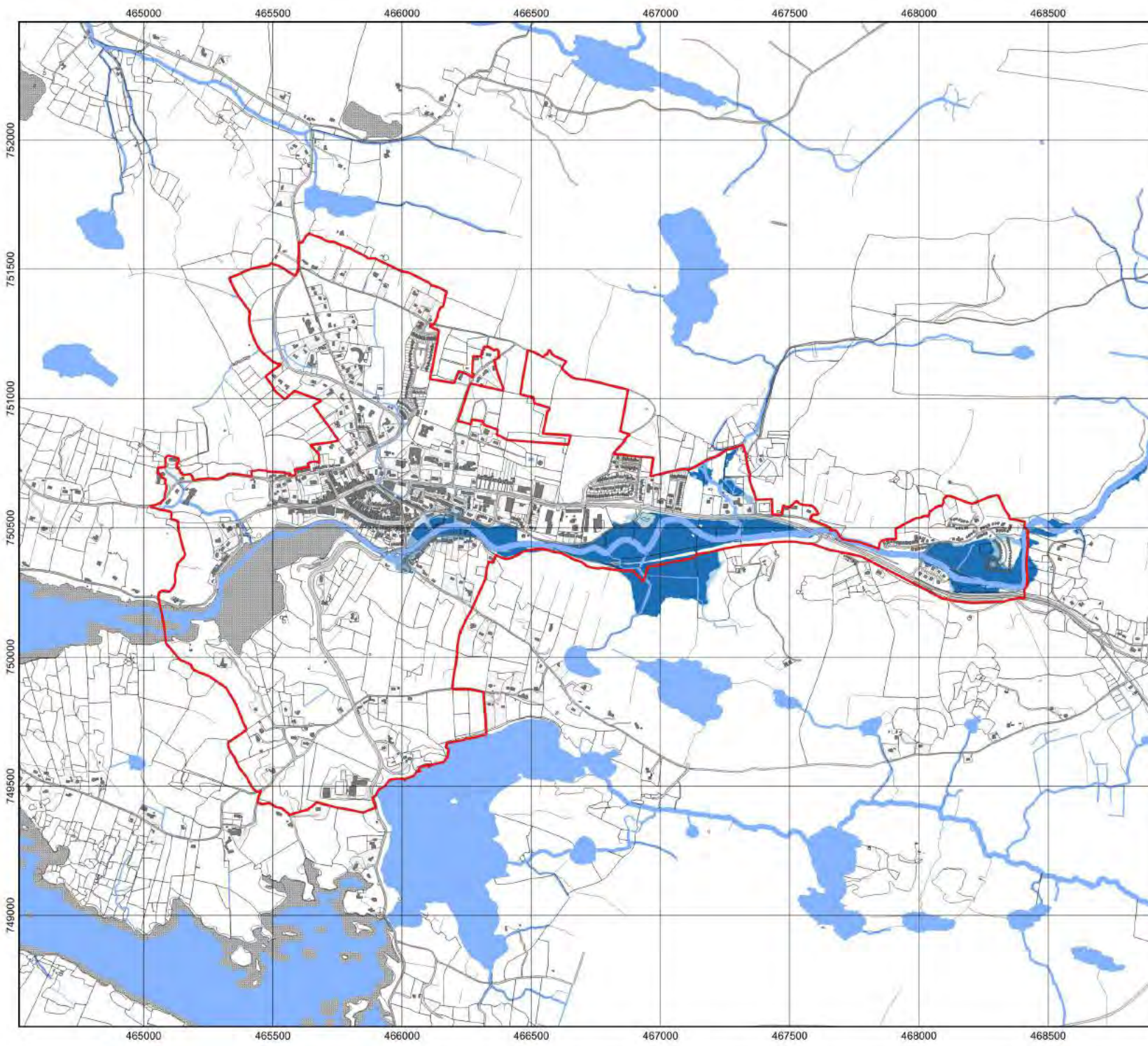
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

***CFRAM Fluvial and/or Coastal
Present Day Scenario***





-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent






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**Galway CDP 2022-2028
SFRA
Clifden
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios**

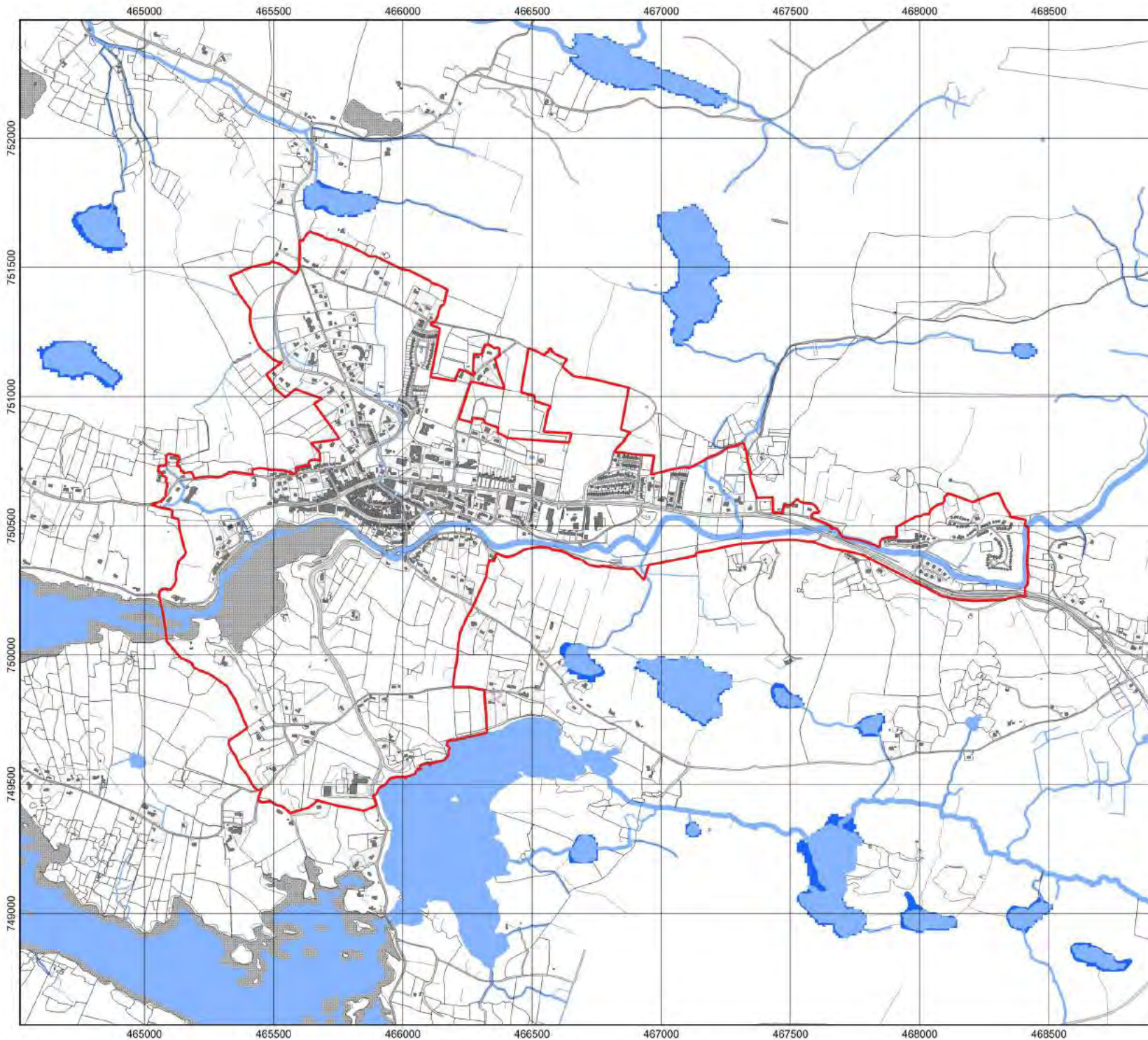
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

***CFRAM Fluvial and/or Coastal
All Scenarios***

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP






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**Galway CDP 2022-2028
SFRA
Clifden
GSI Historical Flood Data and
Groundwater Predictive Modeling**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



**GSI Groundwater Flooding
Predictive Model**

-  High Probability
-  Medium Probability
-  Low Probability

GSI Historical Flood Data

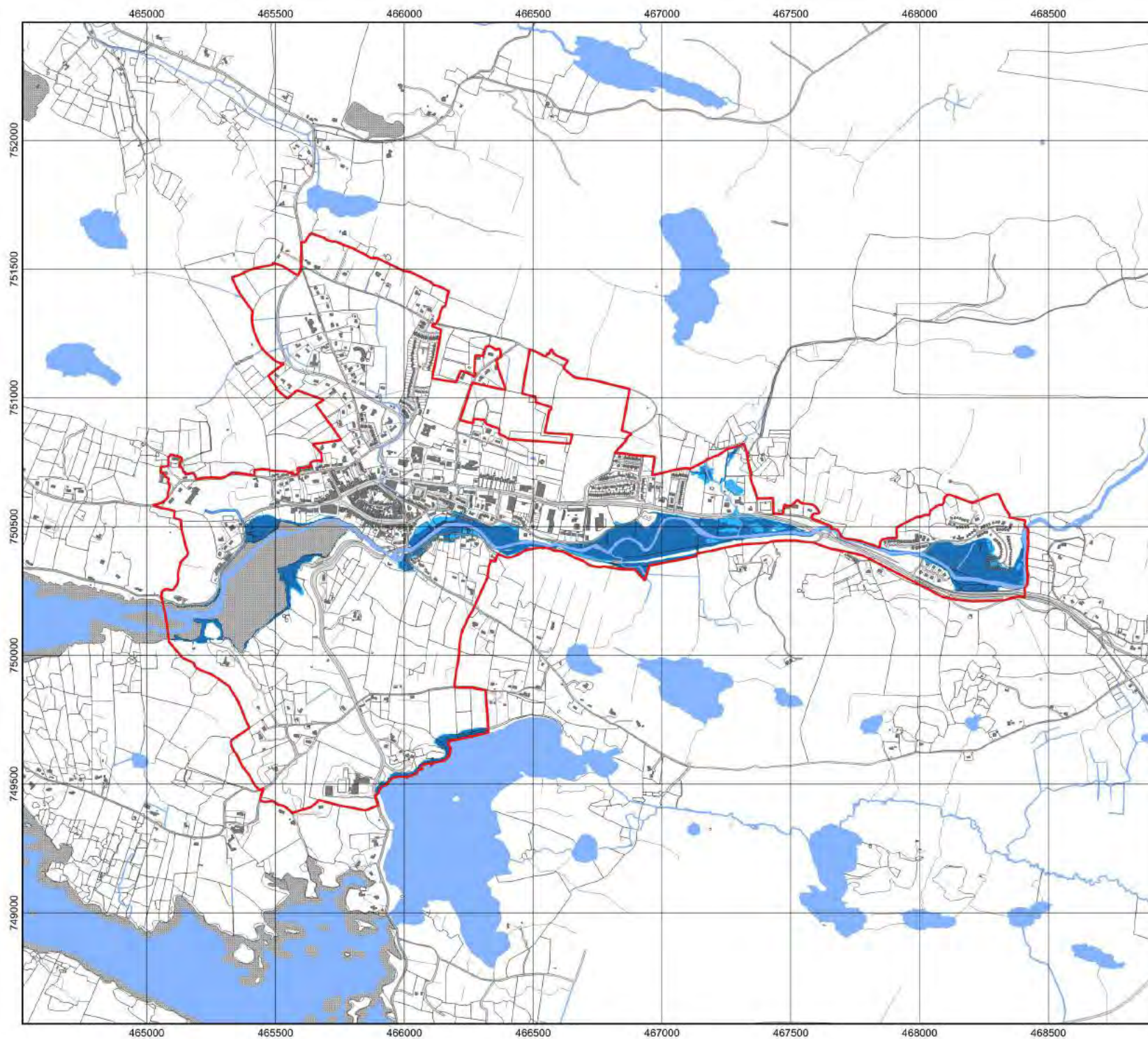
-  Winter 2015-2016
Surface Water Flooding

**Maximum Historic Groundwater
Flooding**

-  Groundwater
-  Groundwater/Surface water



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**Galway CDP 2022-2028
SFRA
Clifden
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

Indicative Flood Zones

-  Flood Zone A
-  Flood Zone B

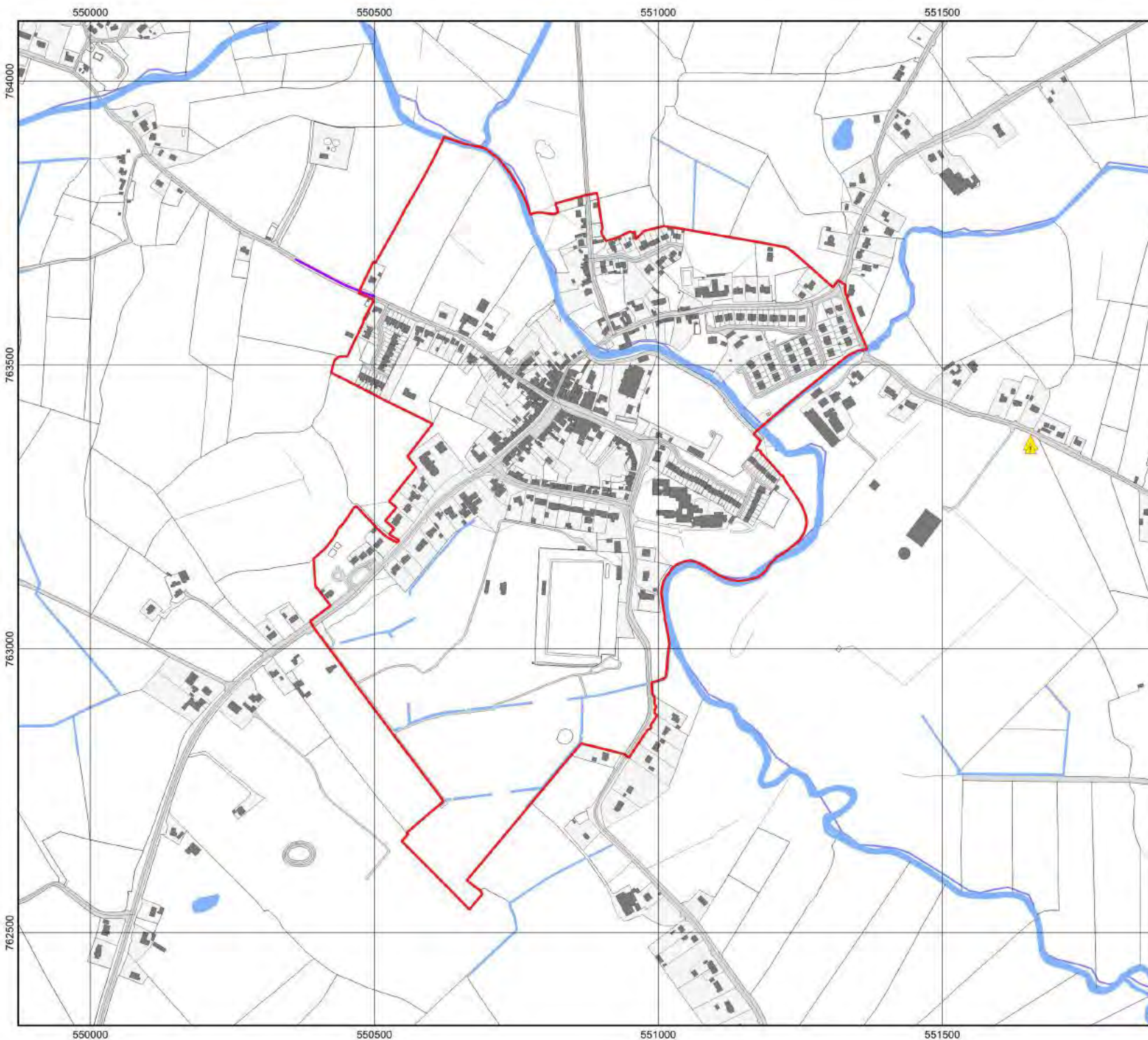
Other Zones

-  Possible Turlough
-  Wet lands, not easily drained



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**Galway CDP 2022-2028
SFRA
Dunmore
OPW & GCC Historical Indicators**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water

Arterial Drainage Scheme

- Channel
- Embankment
- Benefited Land

Drainage Districts

- Channel
- Embankment
- Benefited Land

Land Commission

- Benefited Land

Past Flood Event

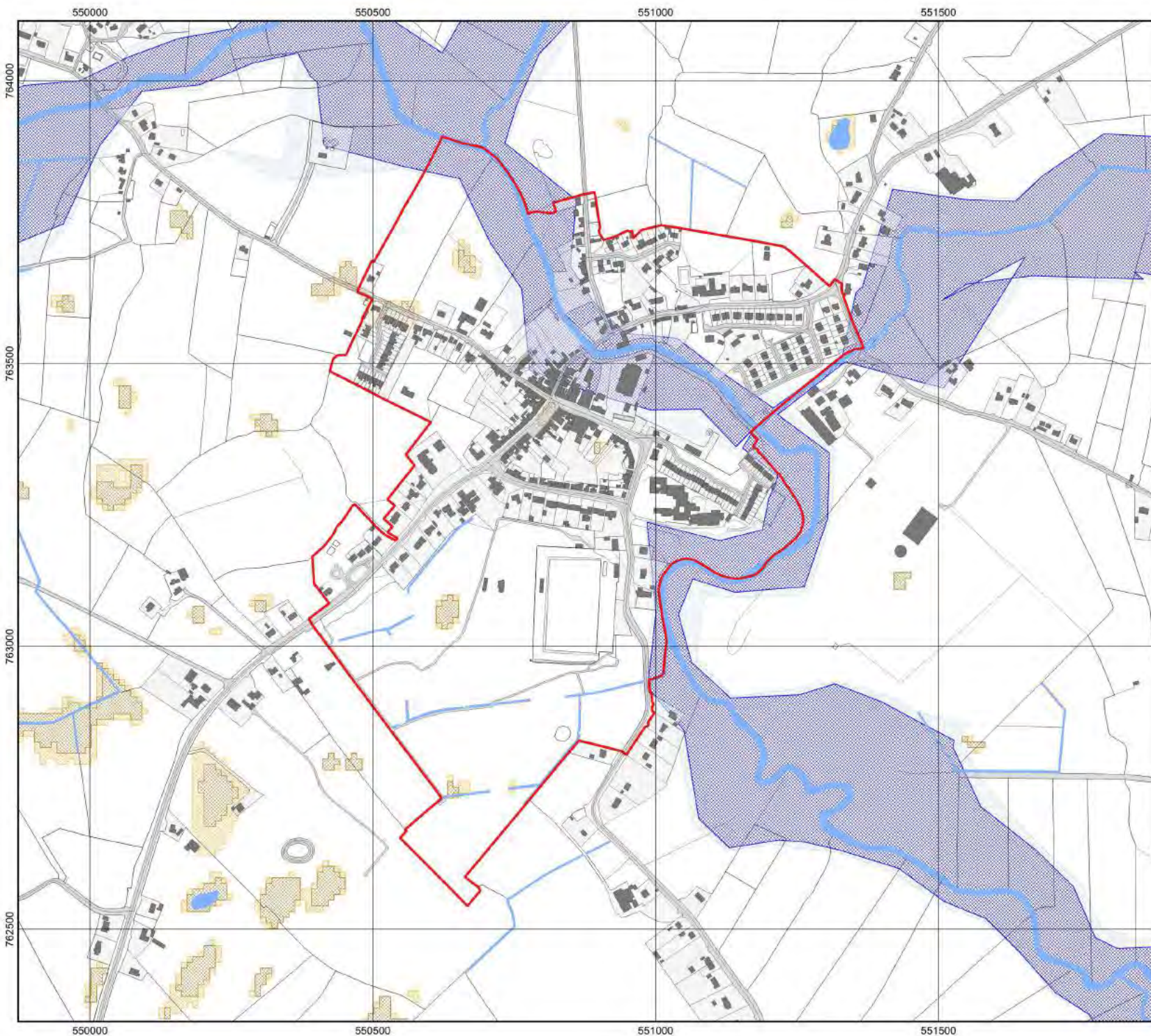
- Single Flood Event
- Recurring Flood Event
- Past Flood Extent

**Galway County Council
Historical Flood Data**

- Flood Points 2009
- Road Closures 2009
- Flooded Houses Dec 2015
- Flooded Roads Dec 2015
- GCC Floods 09 Combined Sources



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**Galway CDP 2022-2028
SFRA
Dunmore
OPW Preliminary Flood Risk
Assessment (PFRA)**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

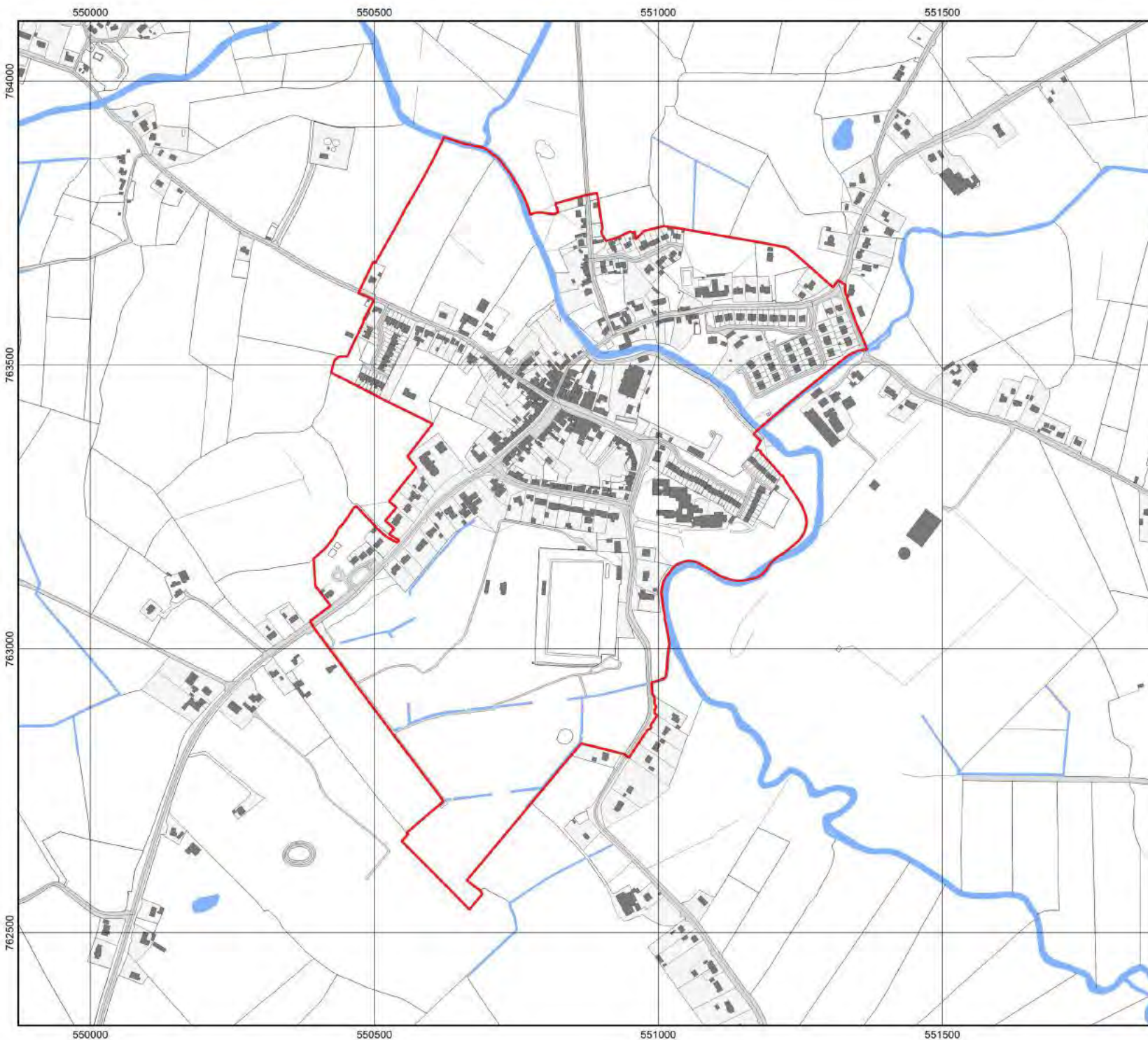
- PFRA Fluvial**
-  PFRA Fluvial 1% AEP
-  PFRA Fluvial 0.1% AEP

- PFRA Pluvial**
-  PFRA Pluvial 1% AEP
-  PFRA Pluvial 0.1% AEP





- PFRA Coastal**
-  PFRA ICPS Coastal 0.5% AEP
-  PFRA ICPS Coastal 0.1% AEP



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**Galway CDP 2022-2028
SFRA**
Dunmore
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario

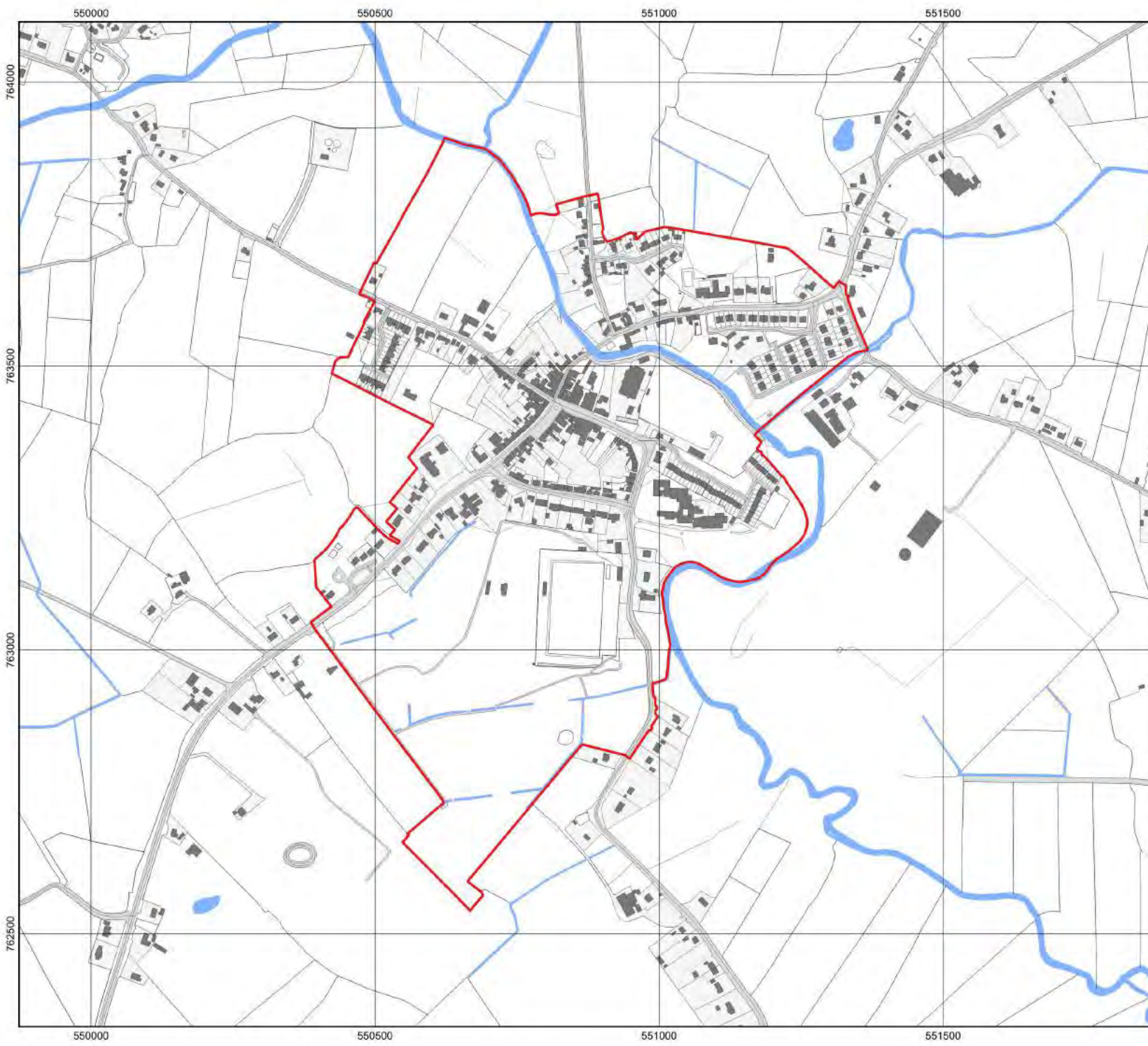
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
Present Day Scenario**





-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent






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**Galway CDP 2022-2028
SFRA**
Dunmore
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios

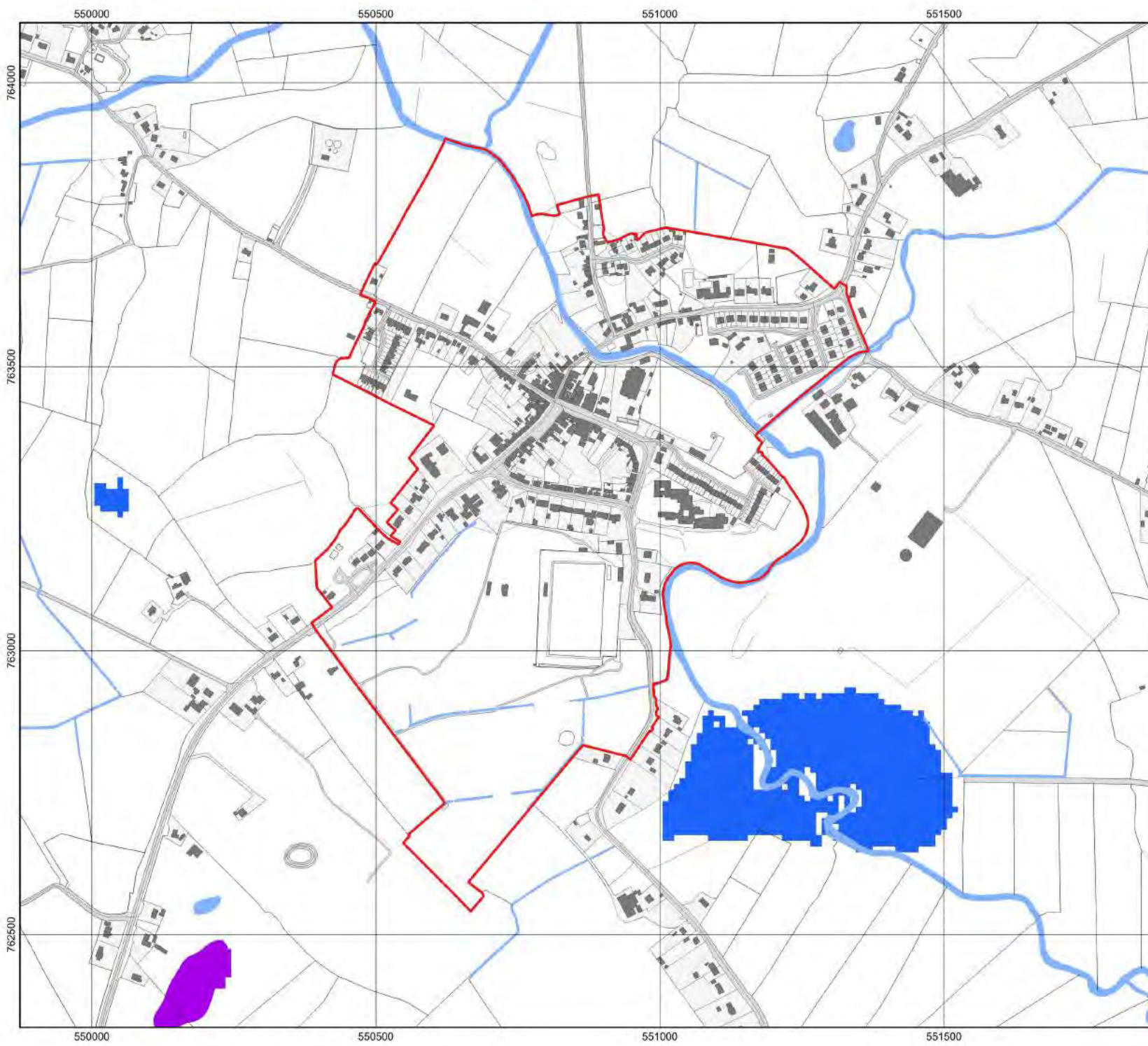
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
All Scenarios**

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP



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**Galway CDP 2022-2028
SFRA
Dunmore
GSI Historical Flood Data and
Groundwater Predictive Modeling**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



**GSI Groundwater Flooding
Predictive Model**

-  High Probability
-  Medium Probability
-  Low Probability

GSI Historical Flood Data

-  Winter 2015-2016
Surface Water Flooding

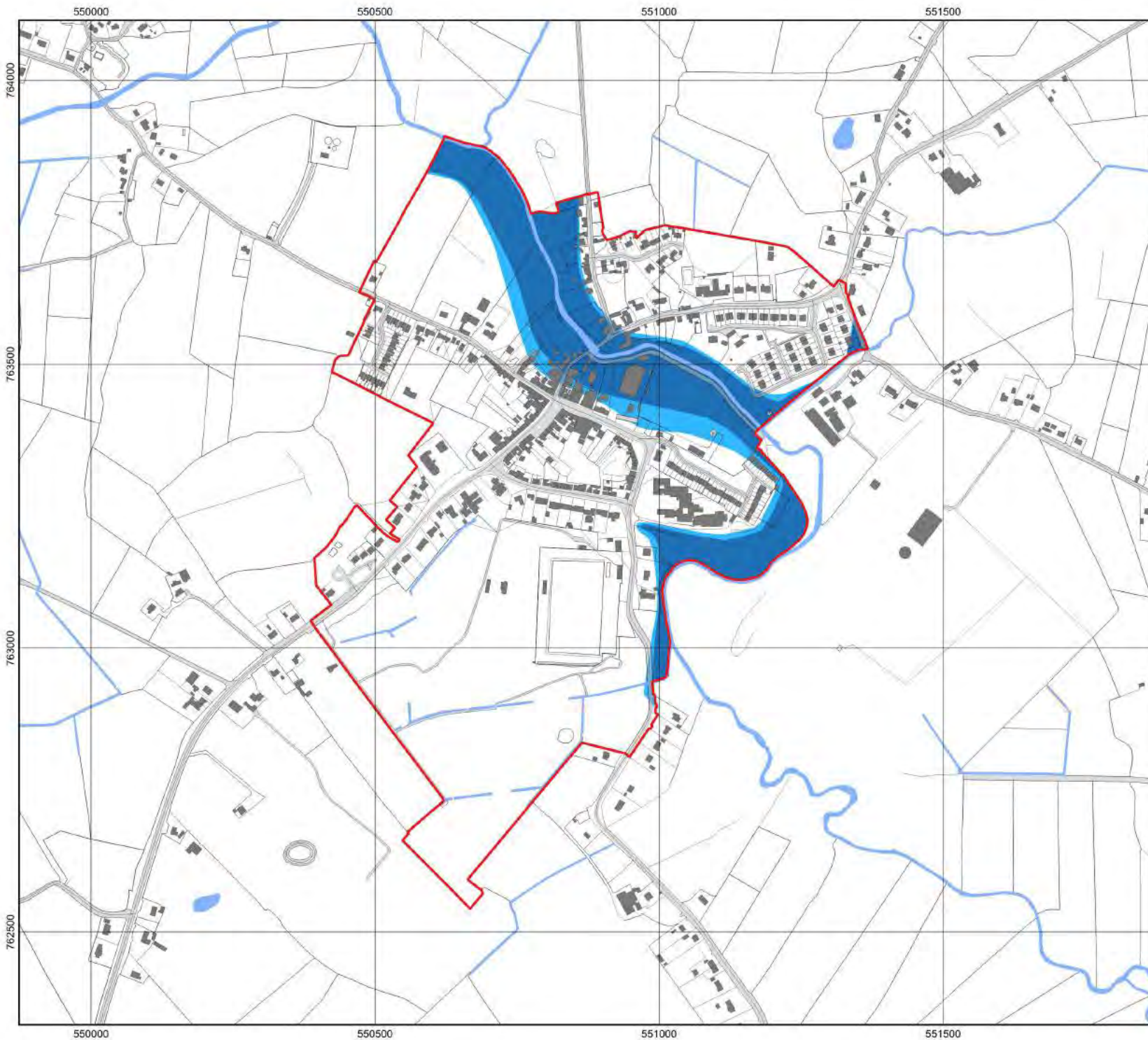
**Maximum Historic Groundwater
Flooding**

-  Groundwater
-  Groundwater/Surface water



 **Comhairle Chontae na Gaillimhe
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**Galway CDP 2022-2028
SFRA
Dunmore
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

Indicative Flood Zones

-  Flood Zone A
-  Flood Zone B

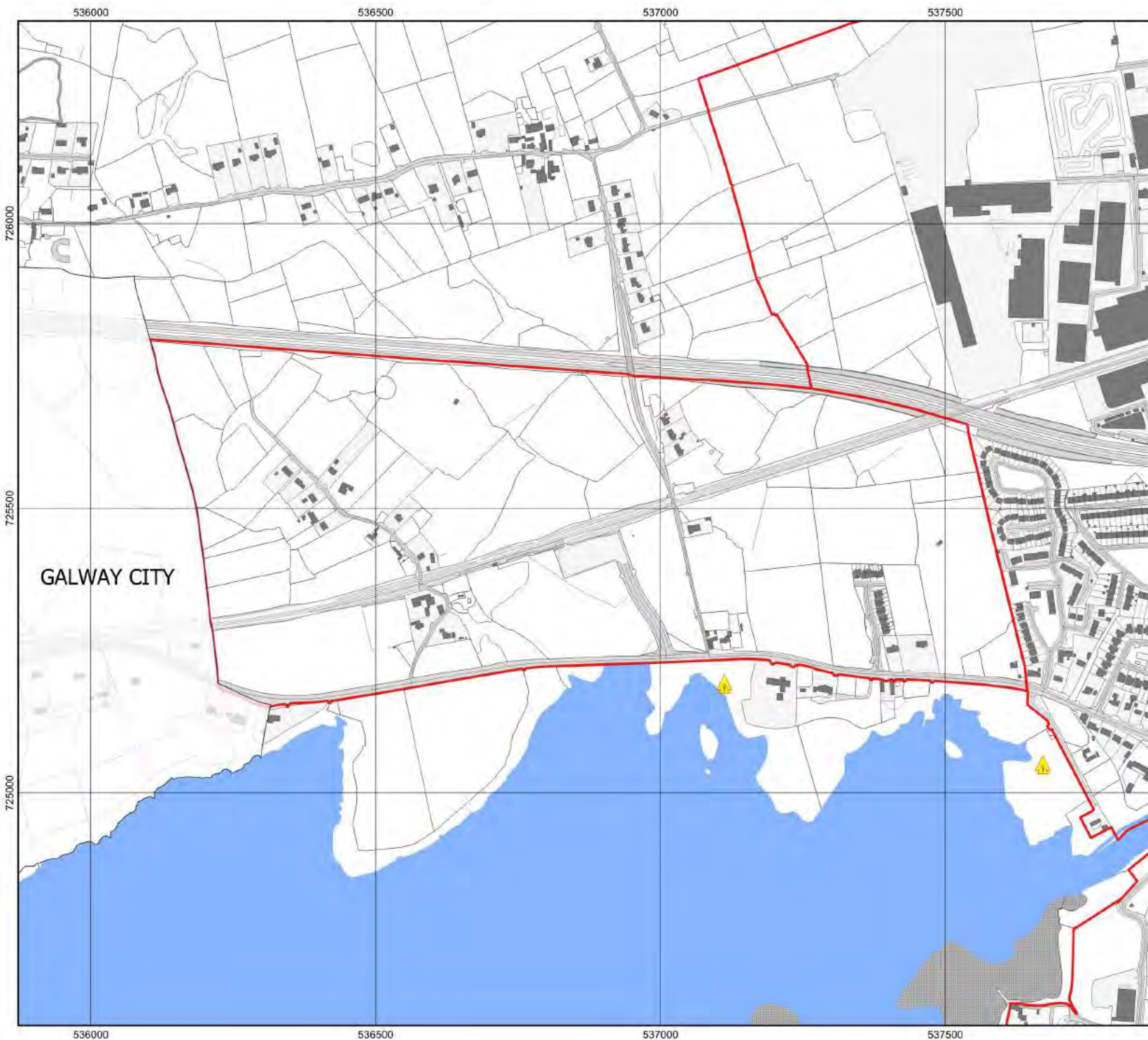
Other Zones

-  Possible Turlough
-  Wet lands, not easily drained



 **Comhairle Chontae na Gaillimhe
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**Galway CDP 2022-2028
SFRA
Garraun
OPW & GCC Historical Indicators**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

- Arterial Drainage Scheme**
-  Channel
-  Embankment
-  Benefited Land

- Drainage Districts**
-  Channel
-  Embankment
-  Benefited Land

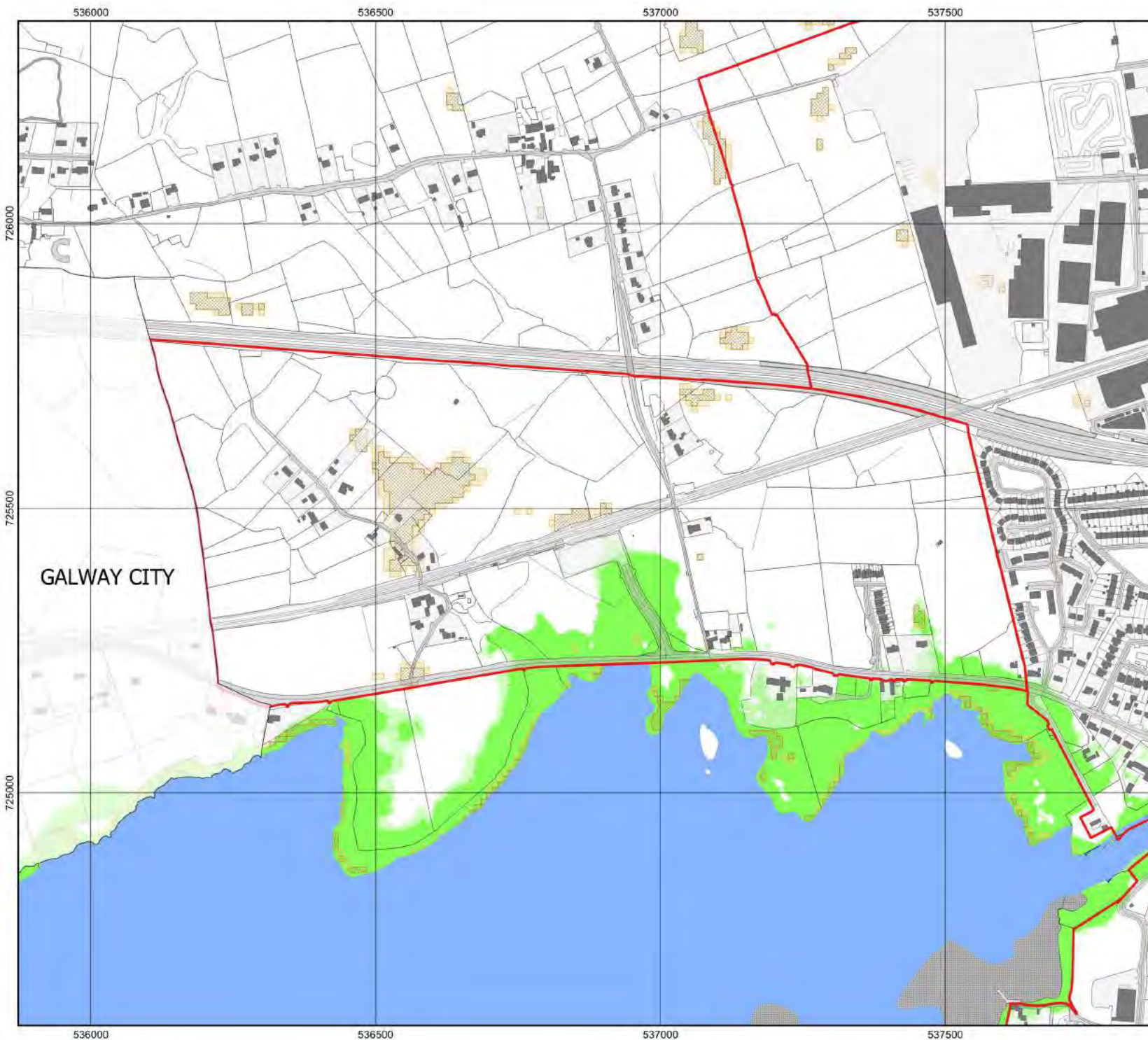
- Land Commission**
-  Benefited Land

- Past Flood Event**
-  Single Flood Event
-  Recurring Flood Event
-  Past Flood Extent

- Galway County Council
Historical Flood Data**
-  Flood Points 2009
-  Road Closures 2009
-  Flooded Houses Dec 2015
-  Flooded Roads Dec 2015
-  GCC Floods 09 Combined Sources



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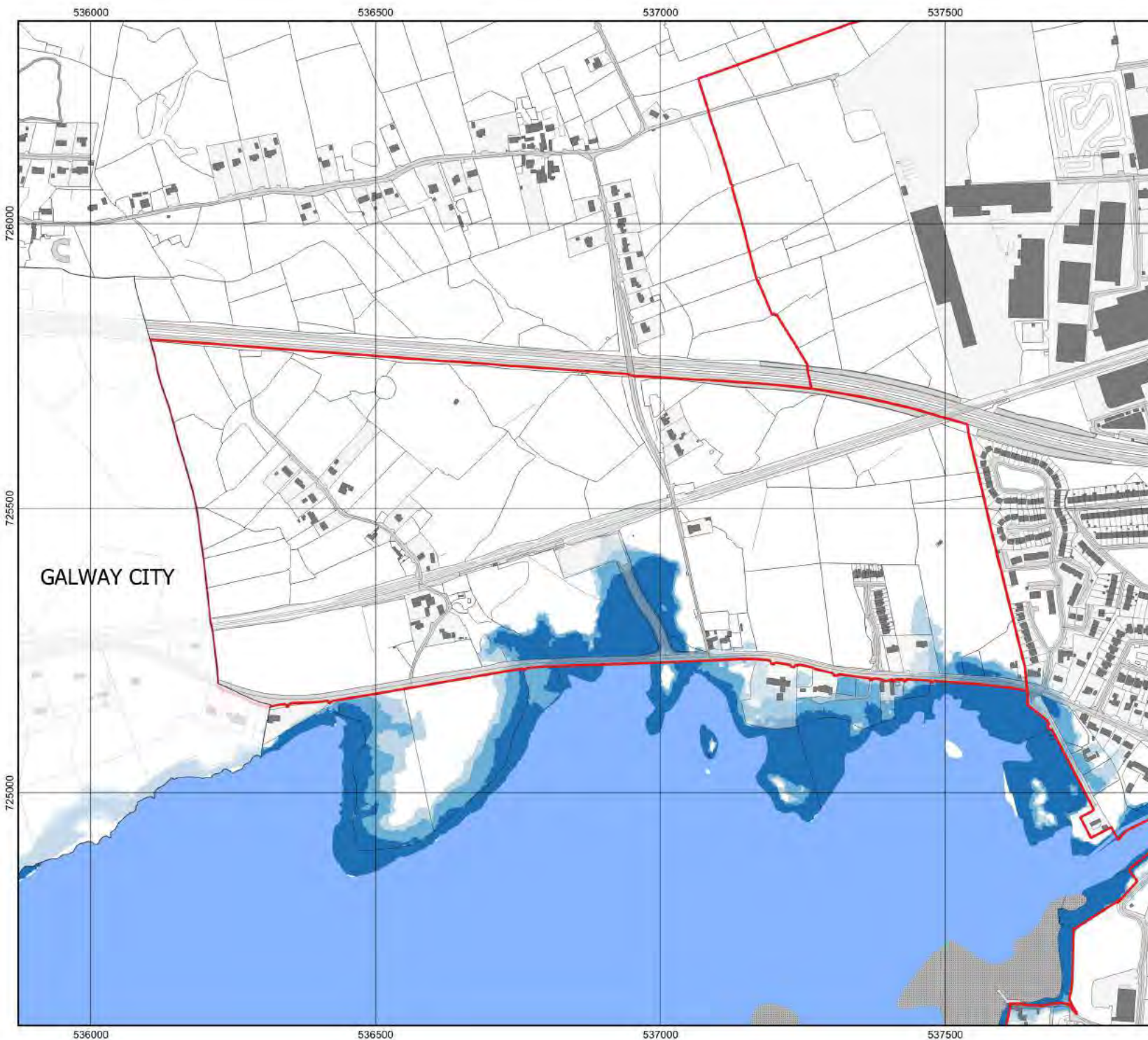
**Galway CDP 2022-2028
SFRA**
**Garraun
OPW Preliminary Flood Risk
Assessment (PFRA)**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water
- PFRA Fluvial**
 -  PFRA Fluvial 1% AEP
 -  PFRA Fluvial 0.1% AEP
- PFRA Pluvial**
 -  PFRA Pluvial 1% AEP
 -  PFRA Pluvial 0.1% AEP
- PFRA Coastal**
 -  PFRA ICPSS Coastal 0.5% AEP
 -  PFRA ICPSS Coastal 0.1% AEP






 **Comhairle Chontae na Gaillimhe
Galway County Council**




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**Galway CDP 2022-2028
SFRA**
**Garraun
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario**

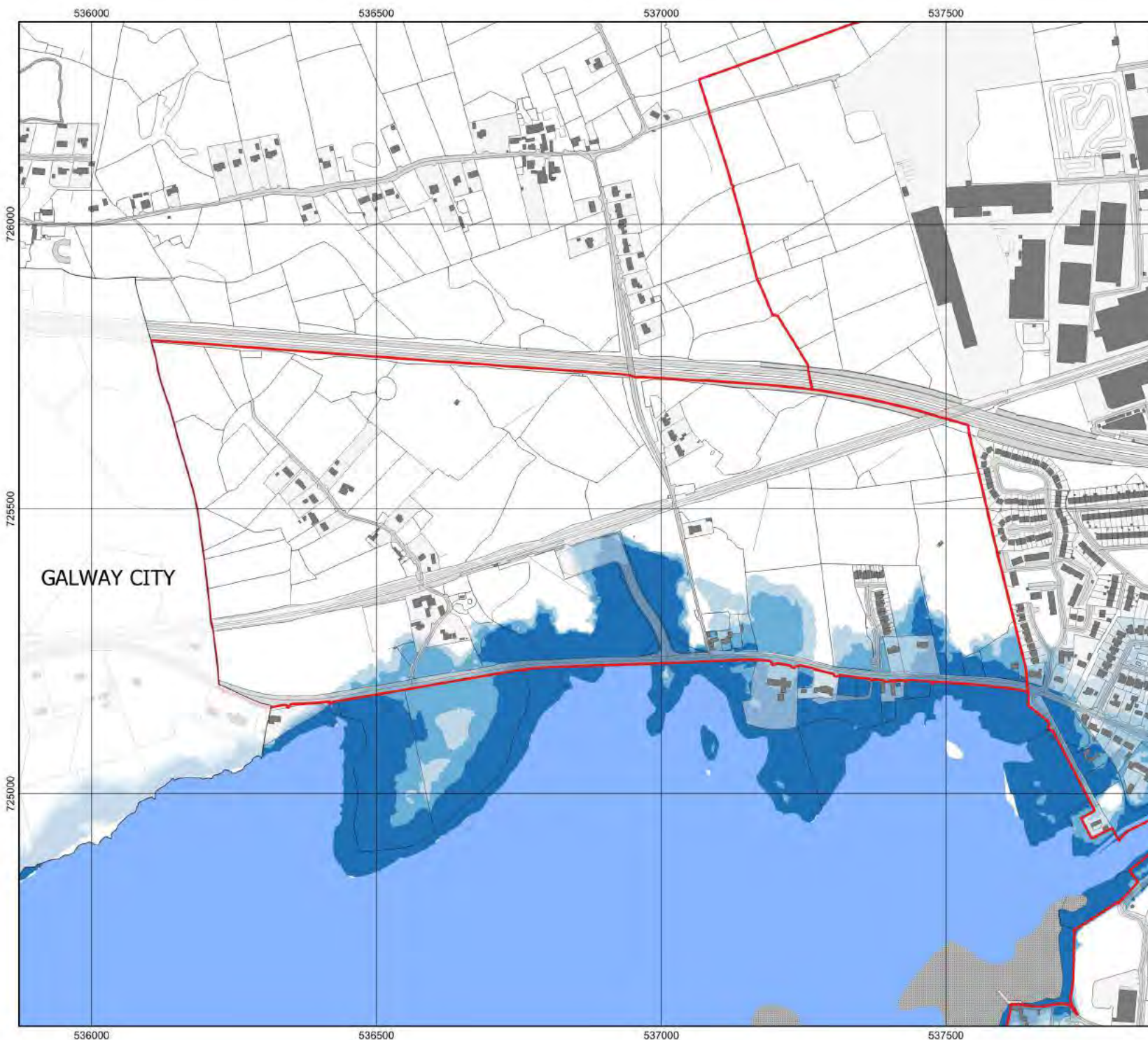
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

***CFRAM Fluvial and/or Coastal
Present Day Scenario***





-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent






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**Galway CDP 2022-2028
SFRA**
Garraun
**OPW Catchment Flood Risk
 Assesment & Management
 (CFRAM) All Scenarios**

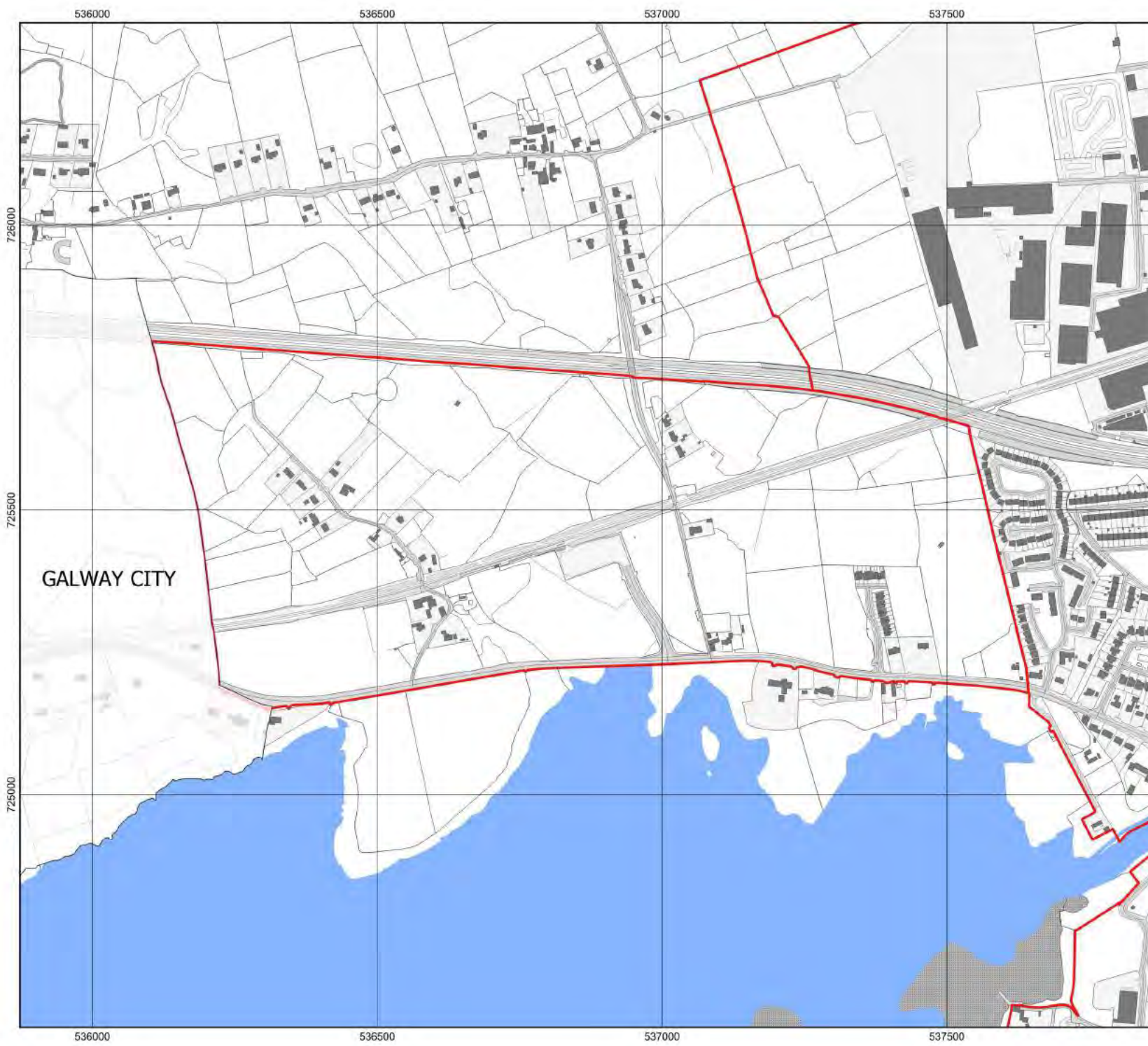
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
 All Scenarios**

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP



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**Galway CDP 2022-2028
SFRA**
Garraun
**GSI Historical Flood Data and
Groundwater Predictive Modeling**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water

- GSI Groundwater Flooding
Predictive Model**
- High Probability
 - Medium Probability
 - Low Probability

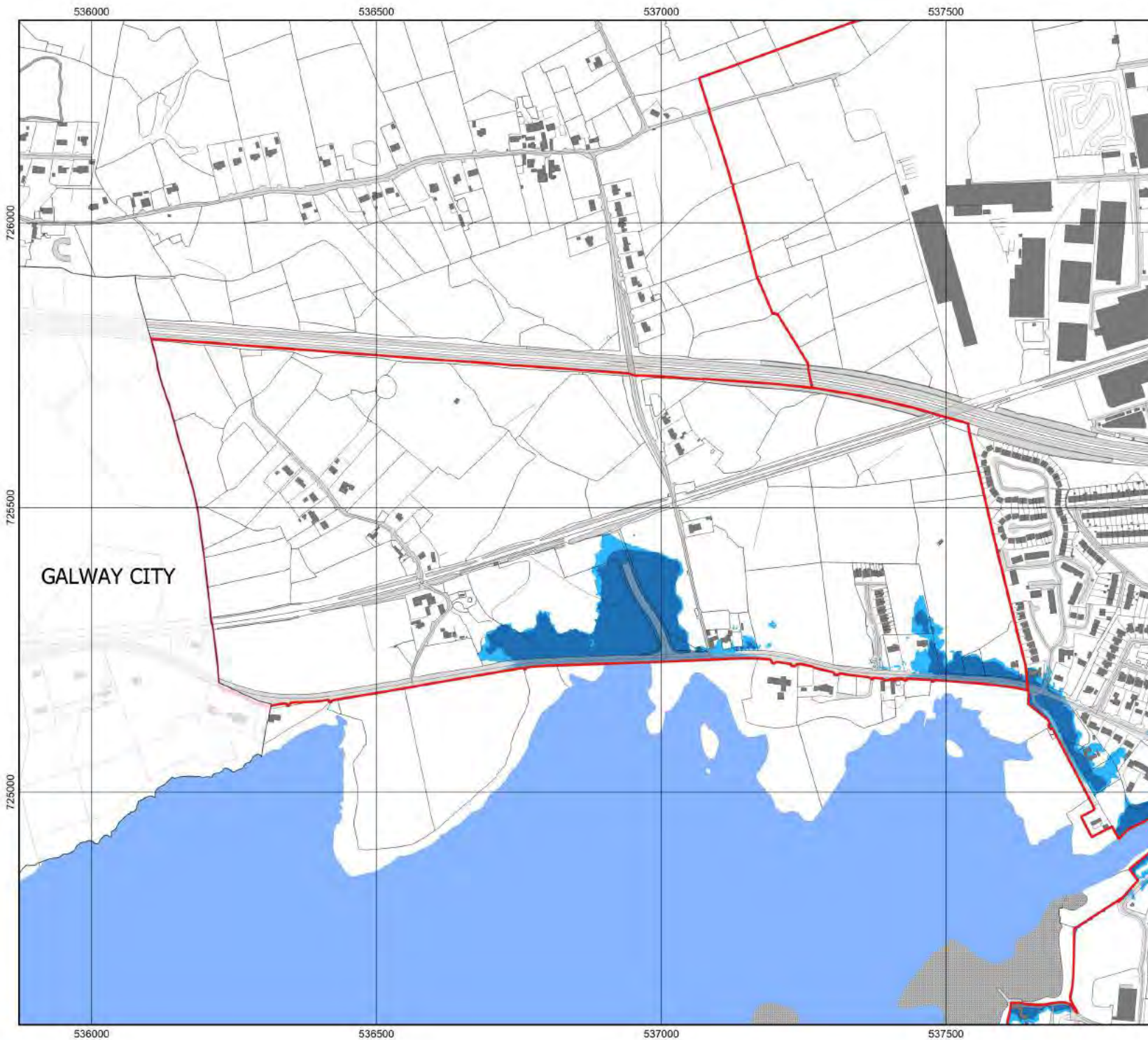
- GSI Historical Flood Data**
- Winter 2015-2016
Surface Water Flooding

- Maximum Historic Groundwater
Flooding**
- Groundwater
 - Groundwater/Surface water




Comhairle Chontae na Gaillimhe
Galway County Council

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**Galway CDP 2022-2028
SFRA
Garraun
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

Indicative Flood Zones

-  Flood Zone A
-  Flood Zone B

Other Zones

-  Possible Turlough
-  Wet lands, not easily drained



 **Comhairle Chontae na Gaillimhe
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562500

563000

563500

762000





761500

562500



563000

563500

**Galway CDP 2022-2028
SFRA
Glenamaddy
OPW & GCC Historical Indicators**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water


Arterial Drainage Scheme

-  Channel
-  Embankment
-  Benefited Land




Drainage Districts

-  Channel
-  Embankment
-  Benefited Land

Land Commission






-  Benefited Land

Past Flood Event

-  Single Flood Event
-  Recurring Flood Event
-  Past Flood Extent

Galway County Council

Historical Flood Data

-  Flood Points 2009
-  Road Closures 2009
-  Flooded Houses Dec 2015
-  Flooded Roads Dec 2015
-  GCC Floods 09 Combined Sources



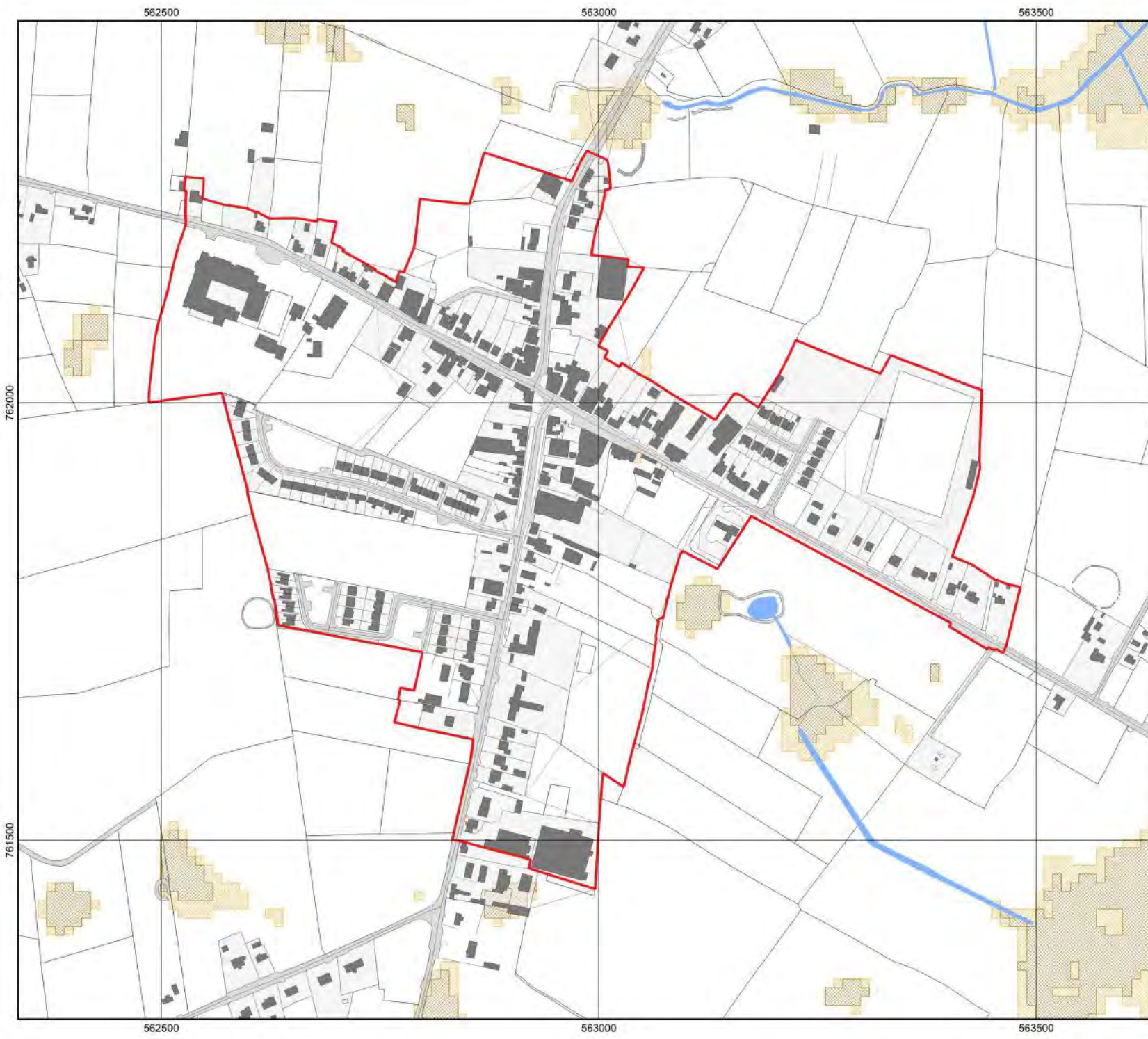
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Galway County Council**

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**Galway CDP 2022-2028
SFRA
Glenamaddy
OPW Preliminary Flood Risk
Assessment (PFRA)**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

- PFRA Fluvial**
-  PFRA Fluvial 1% AEP
-  PFRA Fluvial 0.1% AEP

- PFRA Pluvial**
-  PFRA Pluvial 1% AEP
-  PFRA Pluvial 0.1% AEP

- PFRA Coastal**
-  PFRA ICPS Coastal 0.5% AEP
-  PFRA ICPS Coastal 0.1% AEP



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562500

563000

563500

762000


761500

562500




563000

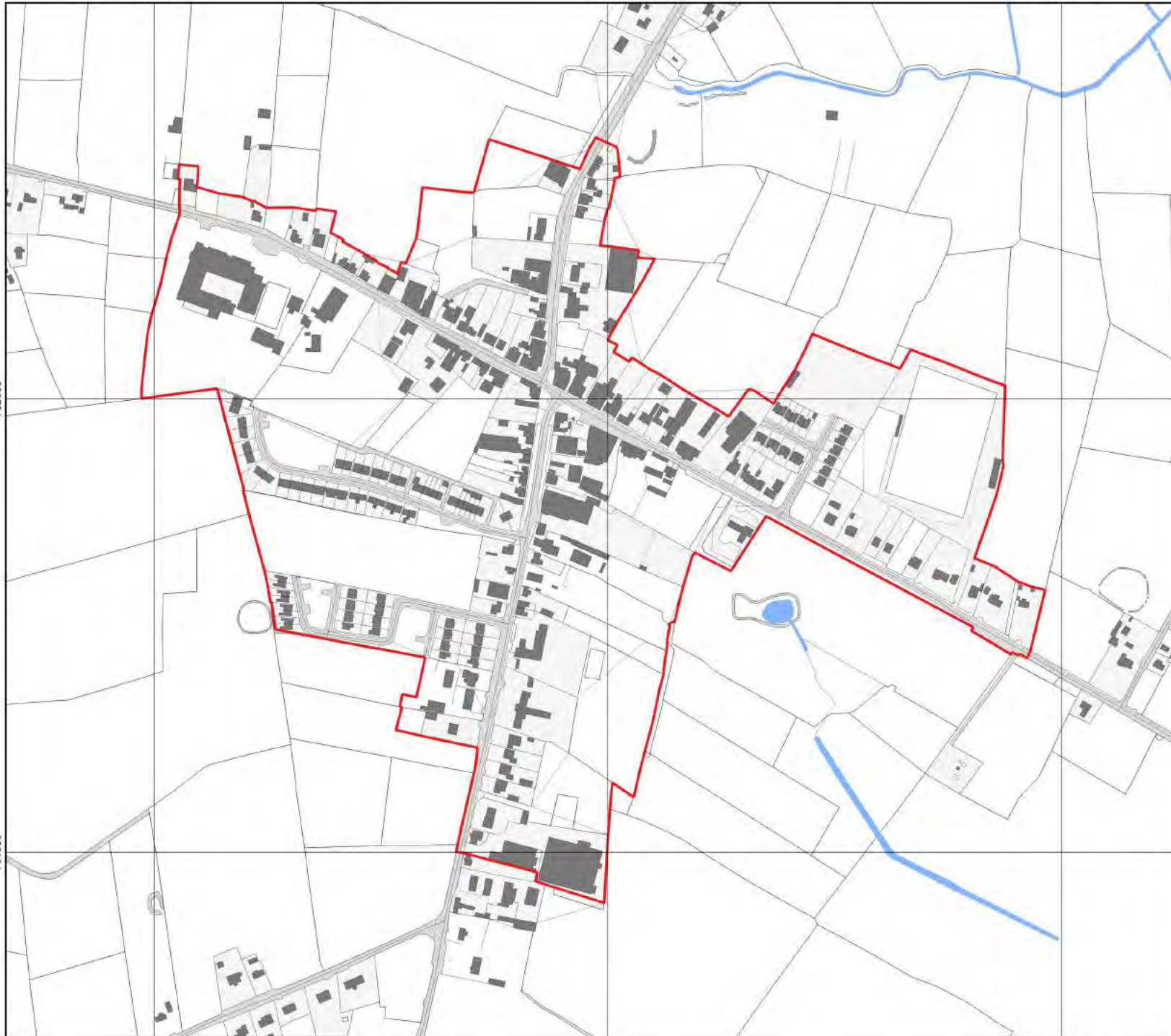
563500

**Galway CDP 2022-2028
SFRA
Glenamaddy
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

***CFRAM Fluvial and/or Coastal
Present Day Scenario***

-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent



**Comhairle Chontae na Gaillimhe
Galway County Council**

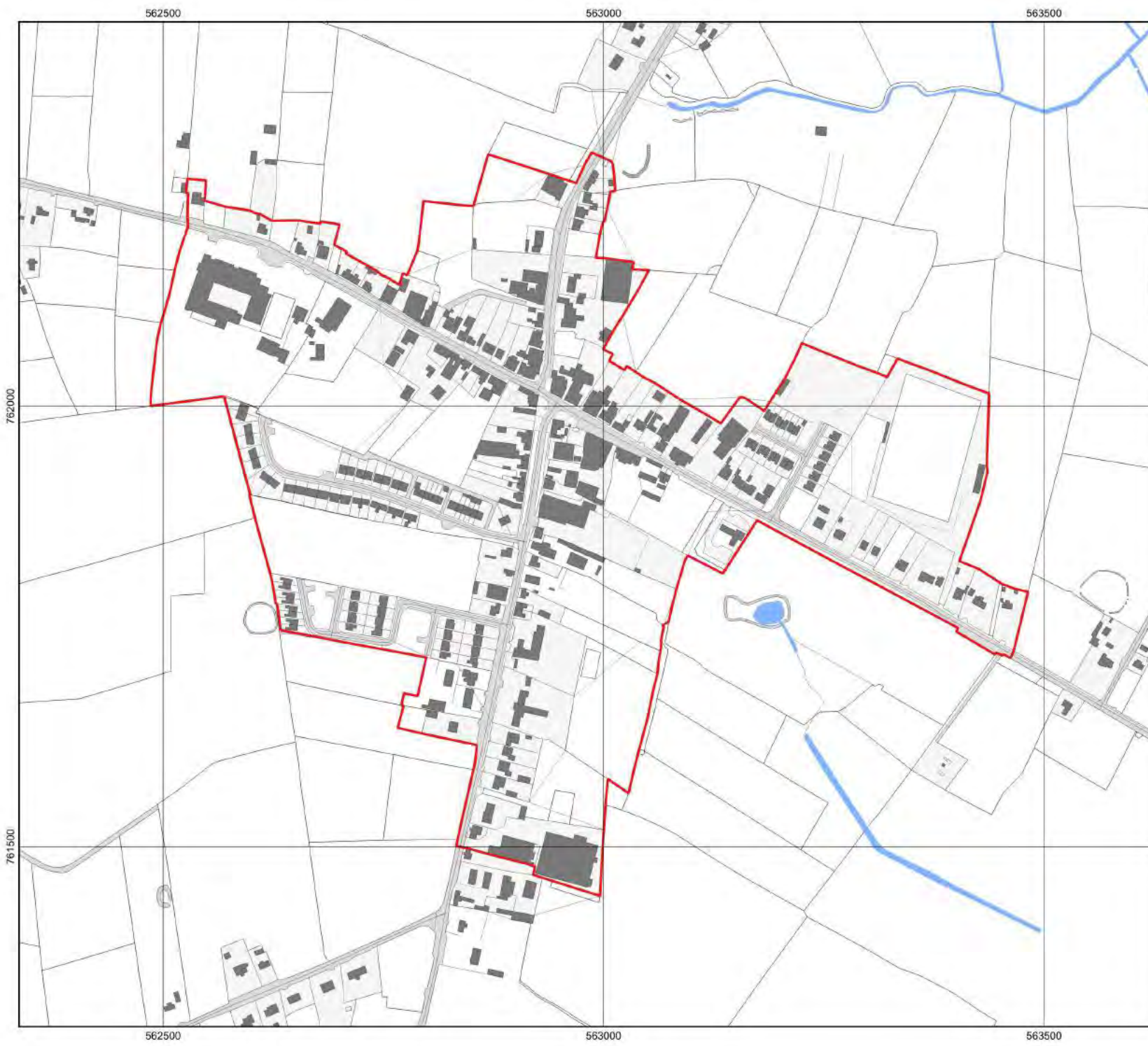
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**Galway CDP 2022-2028
SFRA
Glenamaddy
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios**

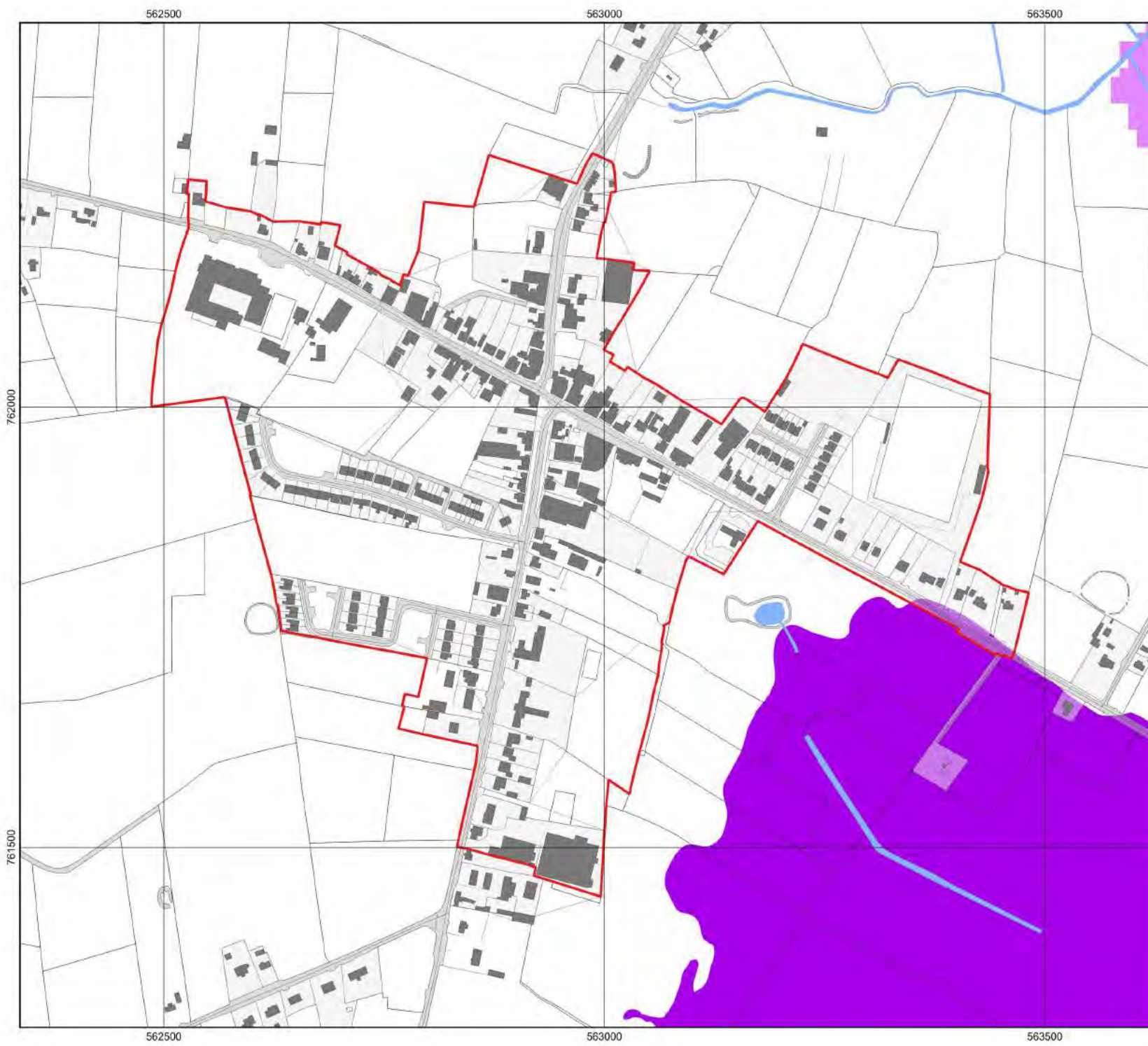
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
All Scenarios**

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP



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**Galway CDP 2022-2028
SFRA
Glenamaddy
GSI Historical Flood Data and
Groundwater Predictive Modeling**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water

**GSI Groundwater Flooding
Predictive Model**

- High Probability
- Medium Probability
- Low Probability

GSI Historical Flood Data

- Winter 2015-2016
Surface Water Flooding

**Maximum Historic Groundwater
Flooding**

- Groundwater
- Groundwater/Surface water



562500

563000

563500

762000

761500

562500


563000

563500



**Galway CDP 2022-2028
SFRA
Glenamaddy
Flood Zones**

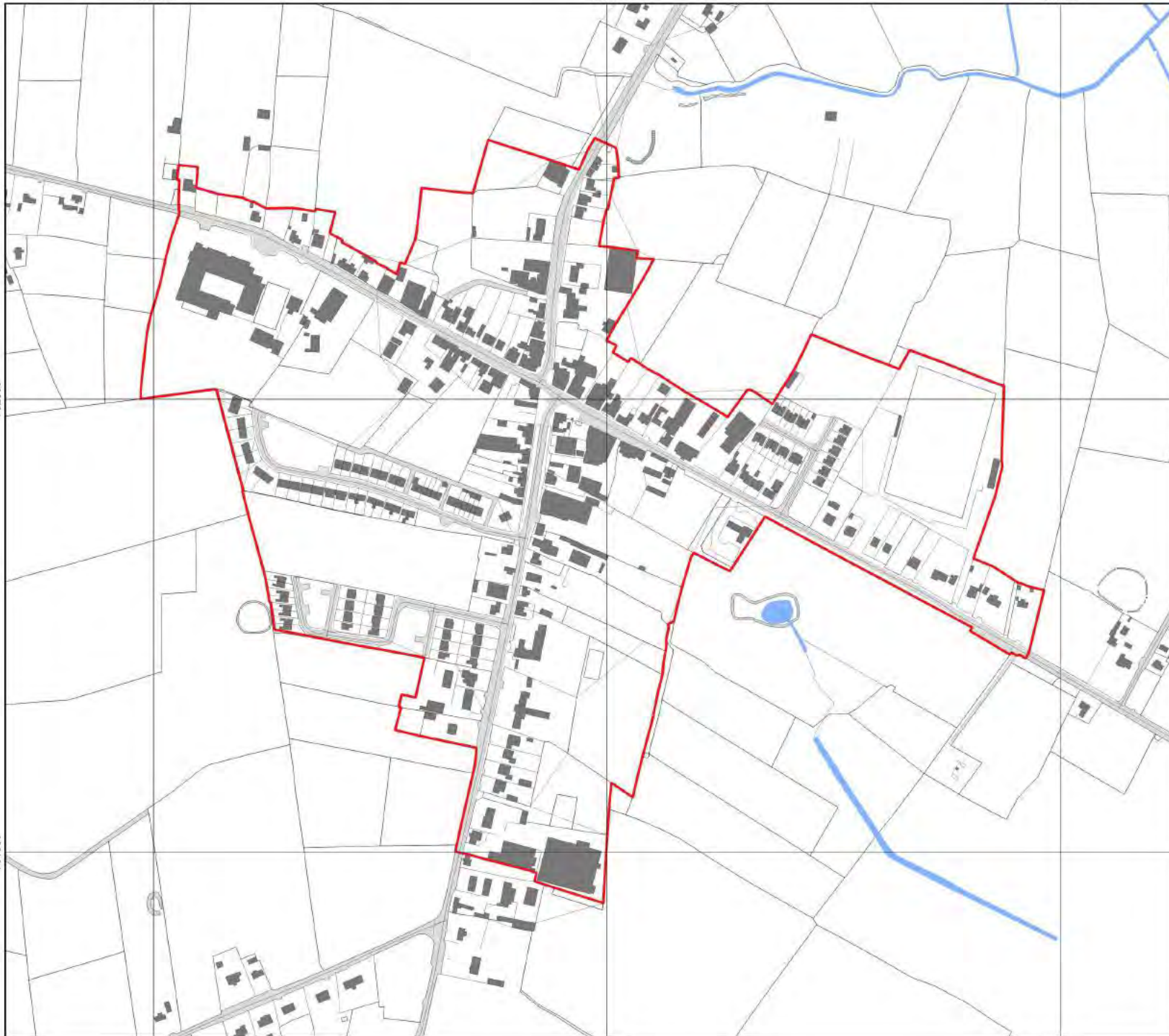
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

Indicative Flood Zones

-  Flood Zone A
-  Flood Zone B

Other Zones

-  Possible Turlough
-  Wet lands, not easily drained



**Comhairle Chontae na Gaillimhe
Galway County Council**

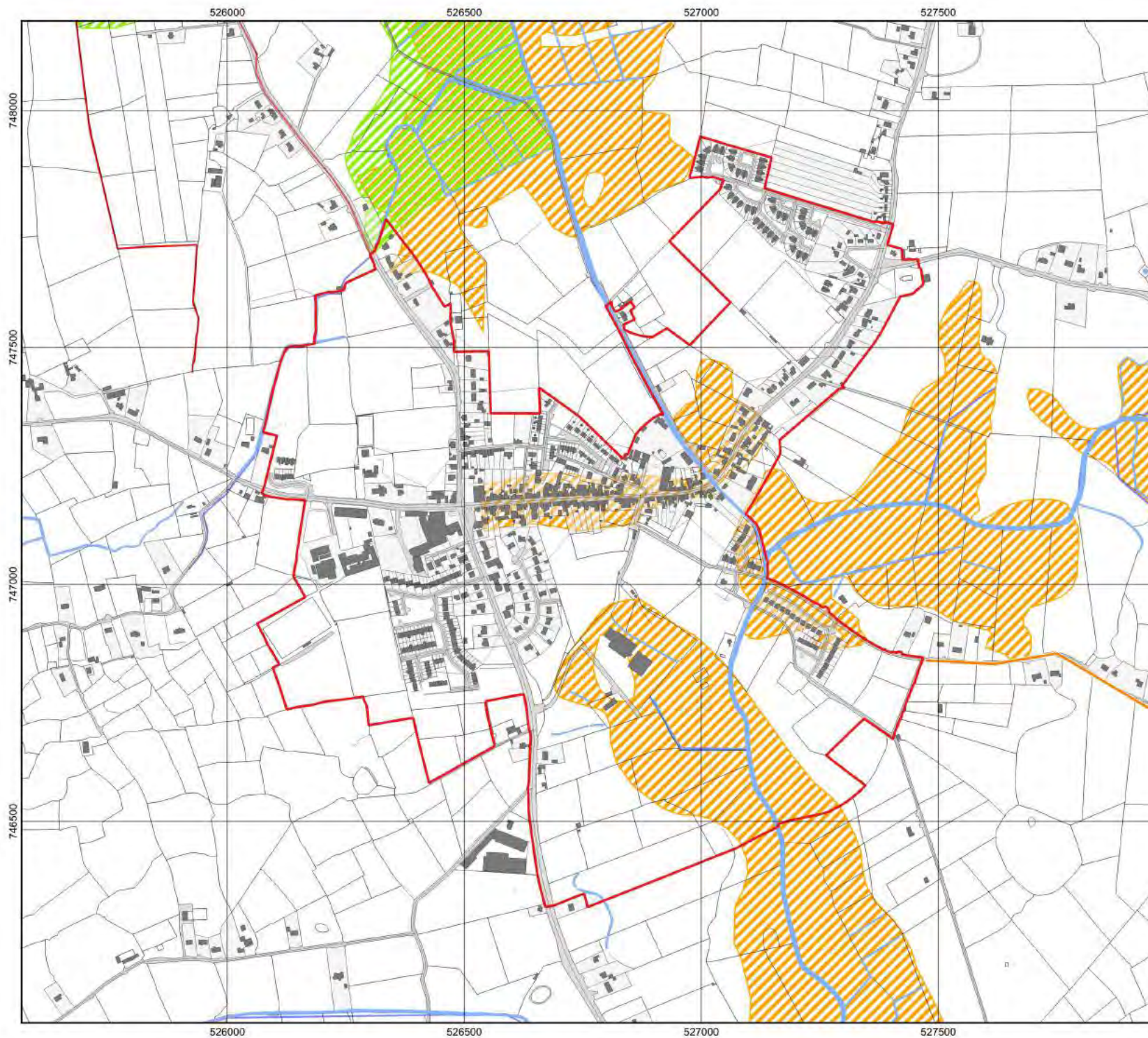
Coordinates in ITM

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**Galway CDP 2022-2028
SFRA
Headford
OPW & GCC Historical Indicators**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water


Arterial Drainage Scheme

-  Channel
-  Embankment
-  Benefited Land




Drainage Districts

-  Channel
-  Embankment
-  Benefited Land






Land Commission

-  Benefited Land

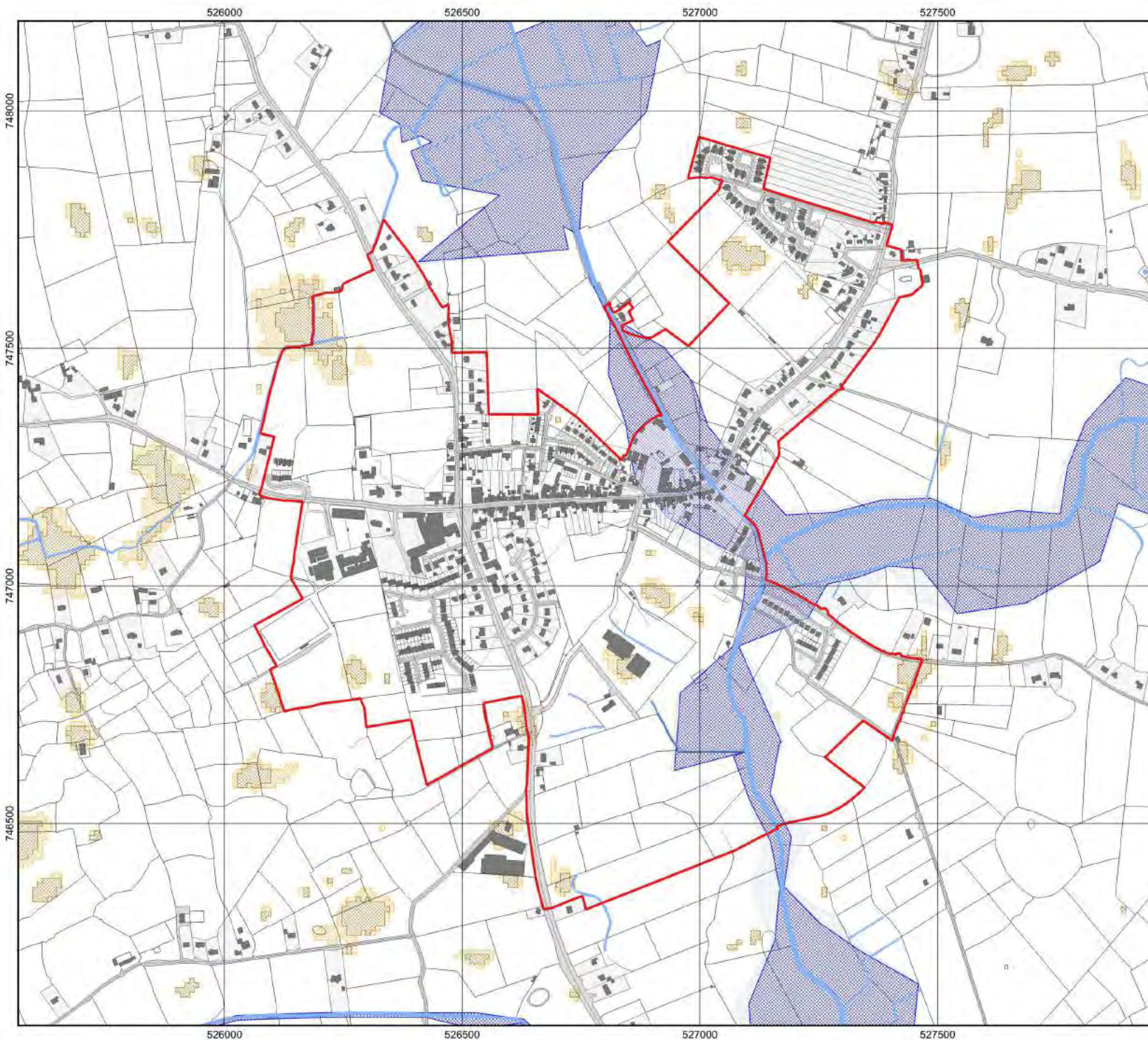
Past Flood Event

-  Single Flood Event
-  Recurring Flood Event
-  Past Flood Extent

**Galway County Council
Historical Flood Data**

-  Flood Points 2009
-  Road Closures 2009
-  Flooded Houses Dec 2015
-  Flooded Roads Dec 2015
-  GCC Floods 09 Combined Sources





**Galway CDP 2022-2028
SFRA
Headford
OPW Preliminary Flood Risk
Assessment (PFRA)**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water

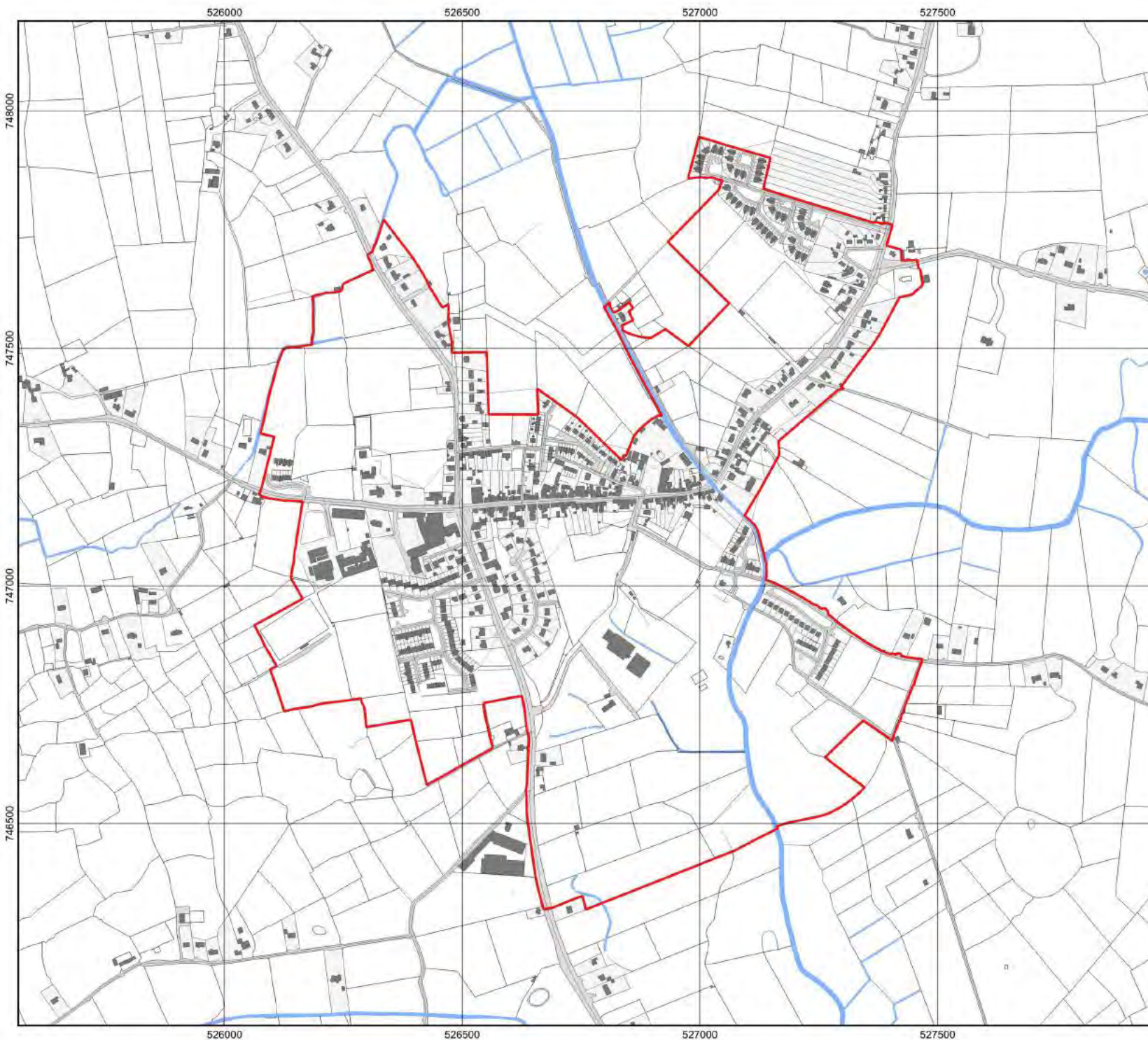
- PFRA Fluvial**
- PFRA Fluvial 1% AEP
- PFRA Fluvial 0.1% AEP

- PFRA Pluvial**
- PFRA Pluvial 1% AEP
- PFRA Pluvial 0.1% AEP




- PFRA Coastal**
- PFRA ICPSS Coastal 0.5% AEP
- PFRA ICPSS Coastal 0.1% AEP




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**Galway CDP 2022-2028
SFRA**
Headford
**OPW Catchment Flood Risk
 Assesment & Management
 (CFRAM) Present Day Scenario**

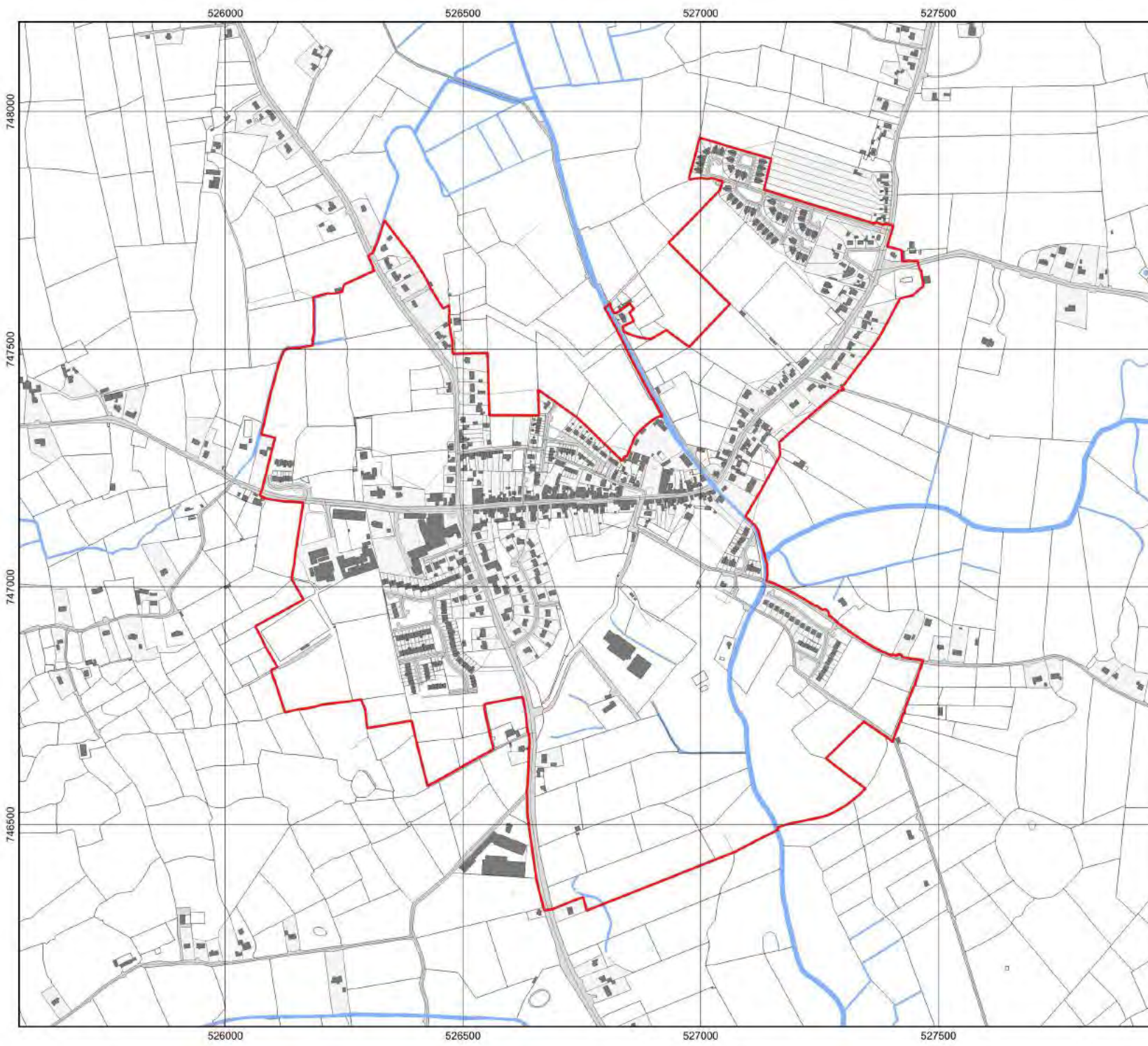
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

***CFRAM Fluvial and/or Coastal
 Present Day Scenario***





-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent






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**Galway CDP 2022-2028
SFRA
Headford
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios**

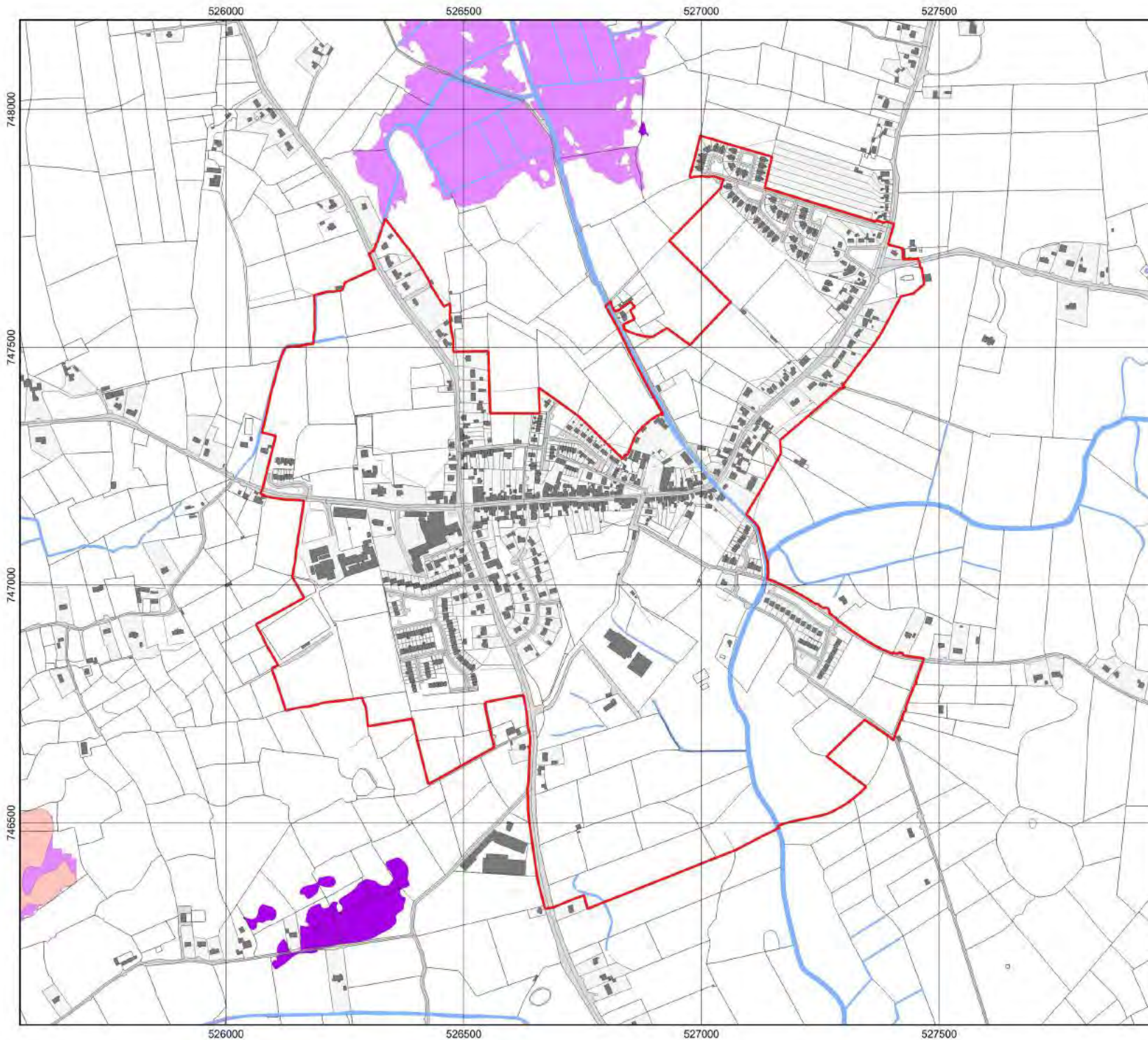
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
All Scenarios**

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP






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**Galway CDP 2022-2028
SFRA
Headford
GSI Historical Flood Data and
Groundwater Predictive Modeling**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



**GSI Groundwater Flooding
Predictive Model**

-  High Probability
-  Medium Probability
-  Low Probability

GSI Historical Flood Data

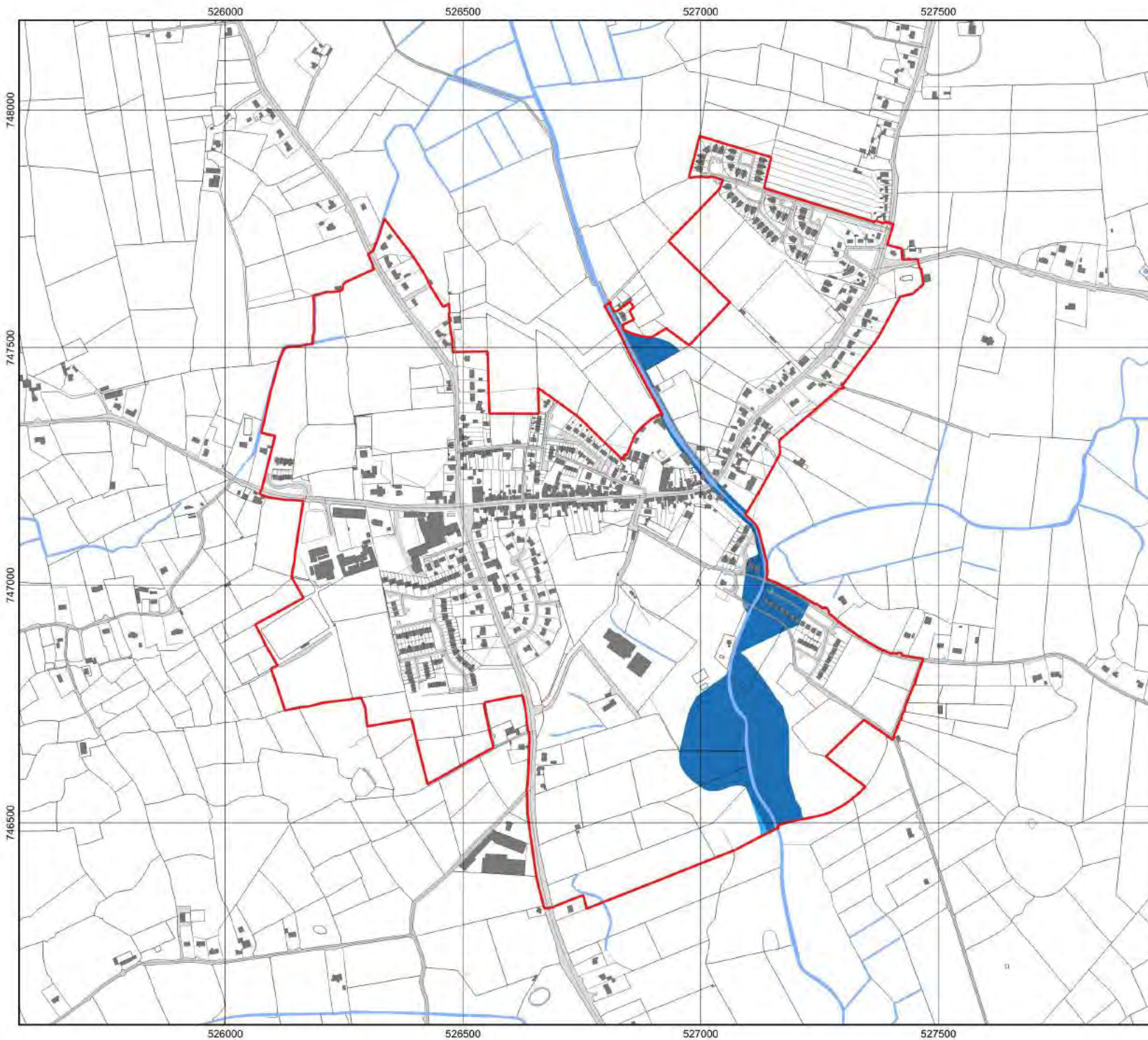
-  Winter 2015-2016
Surface Water Flooding

**Maximum Historic Groundwater
Flooding**

-  Groundwater
-  Groundwater/Surface water



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**Galway CDP 2022-2028
SFRA
Headford
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

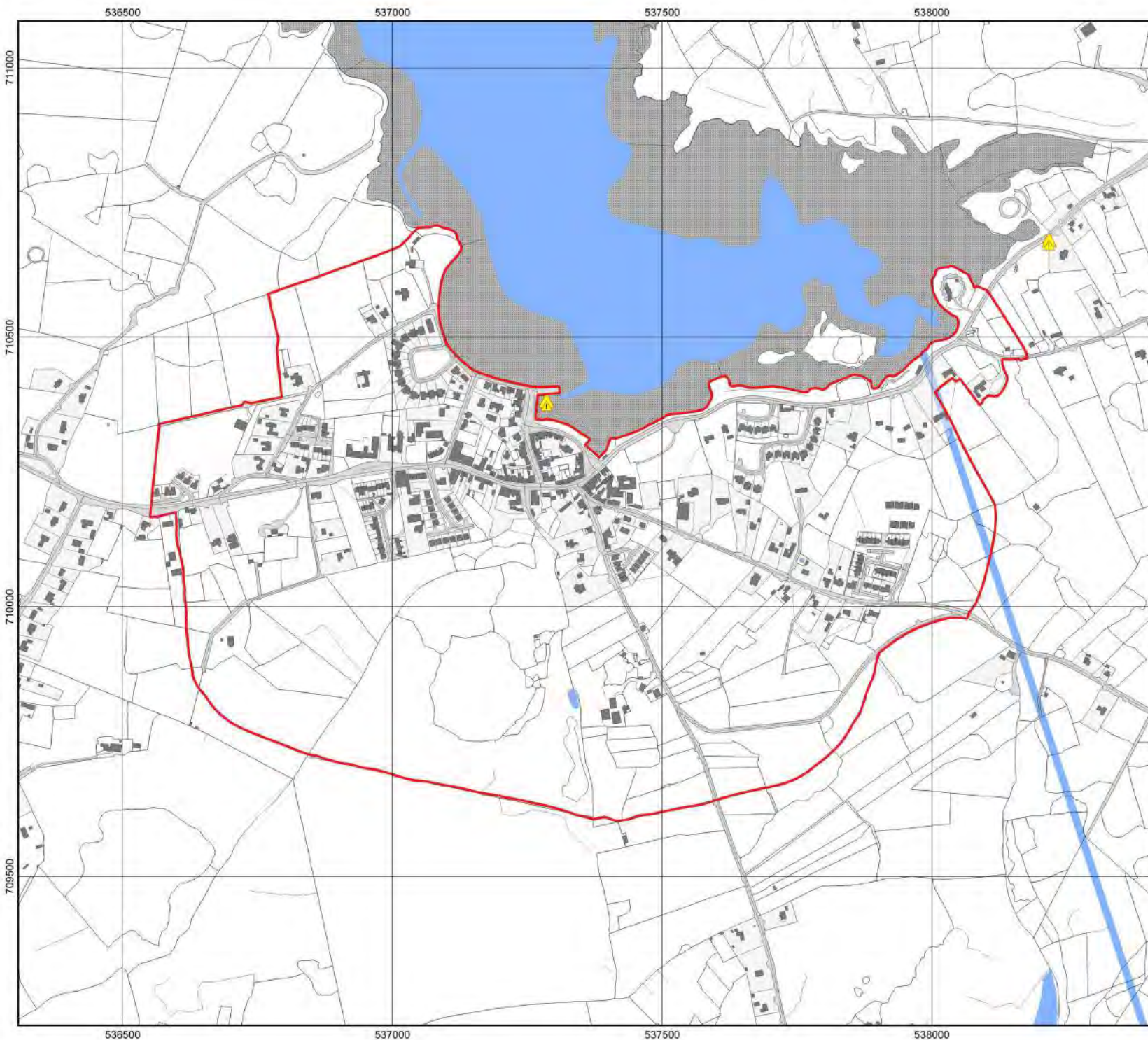
Indicative Flood Zones

-  Flood Zone A
-  Flood Zone B

Other Zones

-  Possible Turlough
-  Wet lands, not easily drained





**Galway CDP 2022-2028
SFRA
Kinvara
OPW & GCC Historical Indicators**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

- Arterial Drainage Scheme**
-  Channel
-  Embankment
-  Benefited Land

- Drainage Districts**
-  Channel
-  Embankment
-  Benefited Land

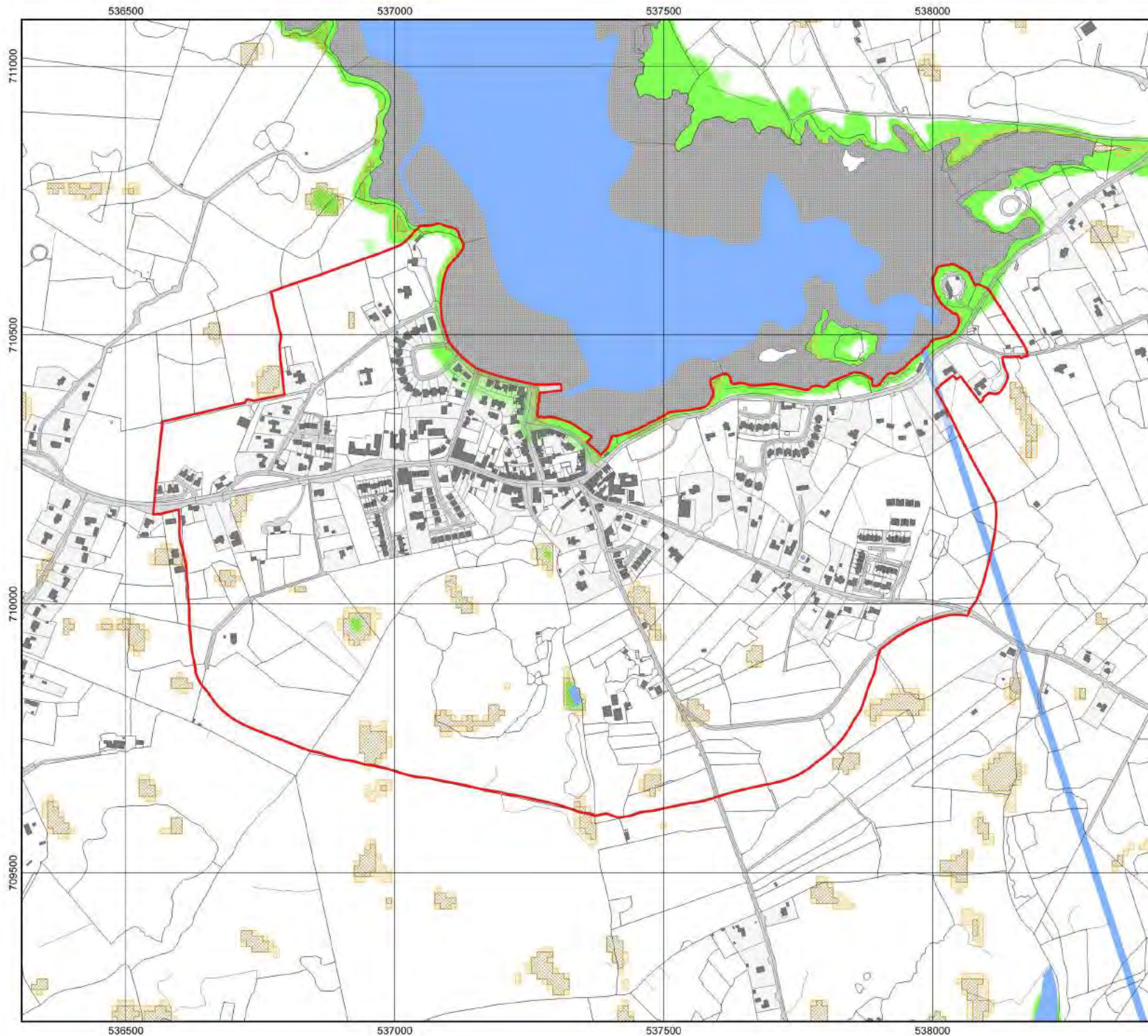
- Land Commission**
-  Benefited Land

- Past Flood Event**
-  Single Flood Event
-  Recurring Flood Event
-  Past Flood Extent

- Galway County Council
Historical Flood Data**
-  Flood Points 2009
-  Road Closures 2009
-  Flooded Houses Dec 2015
-  Flooded Roads Dec 2015
-  GCC Floods 09 Combined Sources



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**Galway CDP 2022-2028
SFRA**
Kinvara
OPW Preliminary Flood Risk
Assessment (PFRA)

- Administrative Area
- Settlement Boundary
- River or Stream
- Water

PFRA Fluvial

- PFRA Fluvial 1% AEP
- PFRA Fluvial 0.1% AEP

PFRA Pluvial

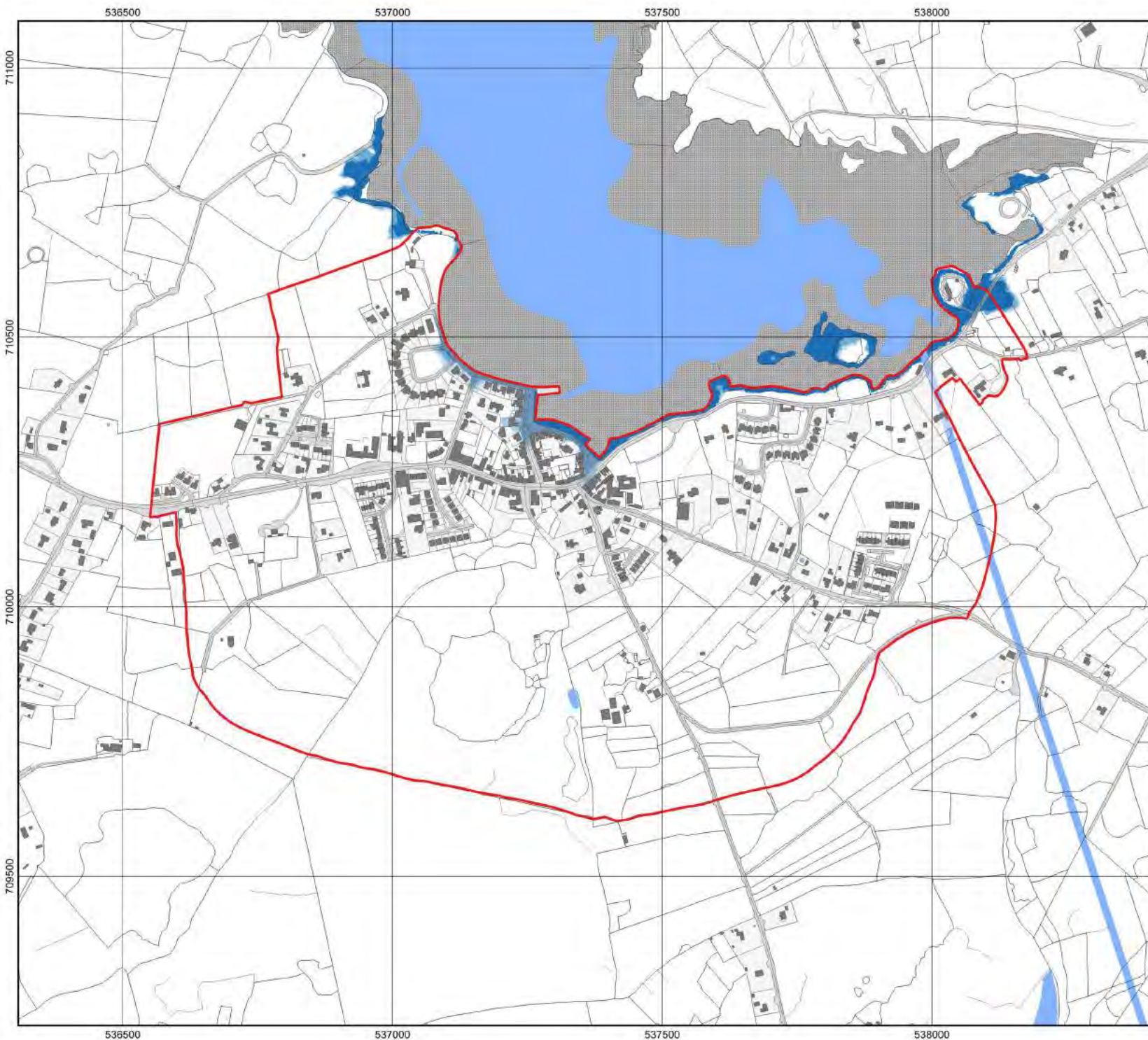
- PFRA Pluvial 1% AEP
- PFRA Pluvial 0.1% AEP

PFRA Coastal





- PFRA ICPSS Coastal 0.5% AEP
- PFRA ICPSS Coastal 0.1% AEP






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**Galway CDP 2022-2028
SFRA**
Kinvara
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario

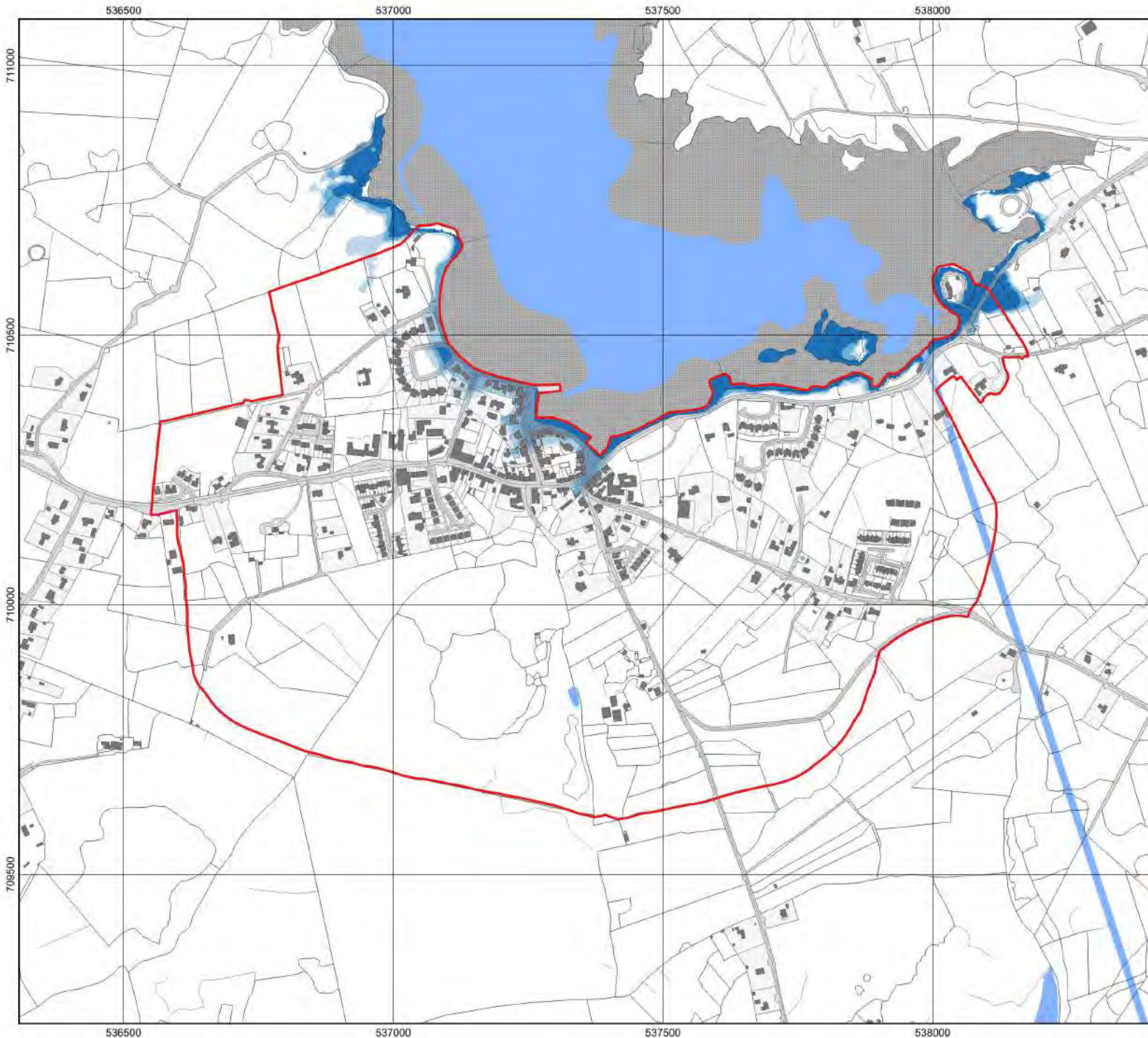
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
Present Day Scenario**

-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent






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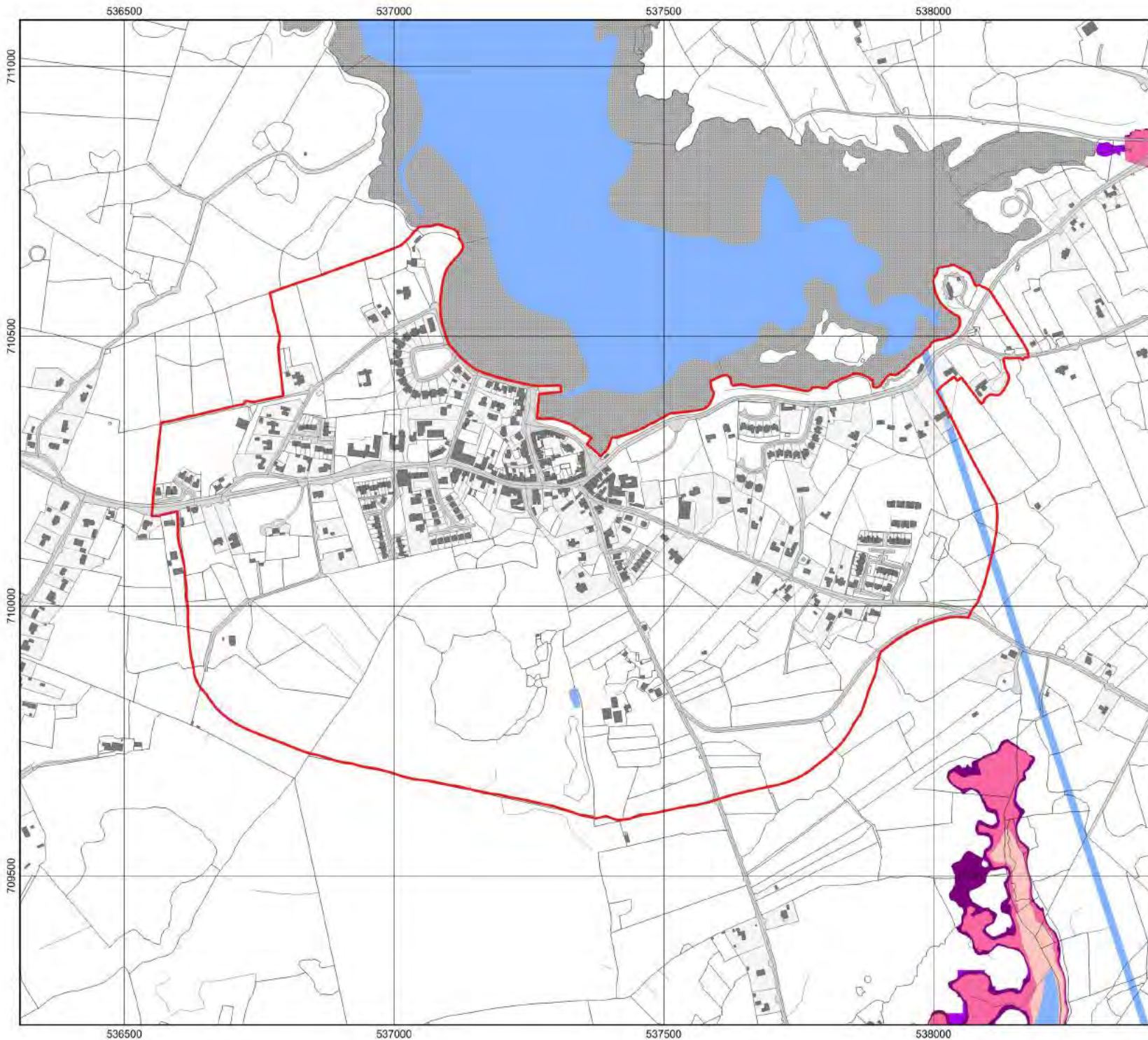
**Galway CDP 2022-2028
SFRA**
Kinvara
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
All Scenarios**

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP





Galway CDP 2022-2028



SFRA

Kinvara


GSI Historical Flood Data and Groundwater Predictive Modeling

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



GSI Groundwater Flooding Predictive Model

-  High Probability
-  Medium Probability
-  Low Probability

GSI Historical Flood Data

-  Winter 2015-2016
Surface Water Flooding

Maximum Historic Groundwater Flooding

-  Groundwater
-  Groundwater/Surface water



Comhairle Chontae na Gaillimhe
Galway County Council

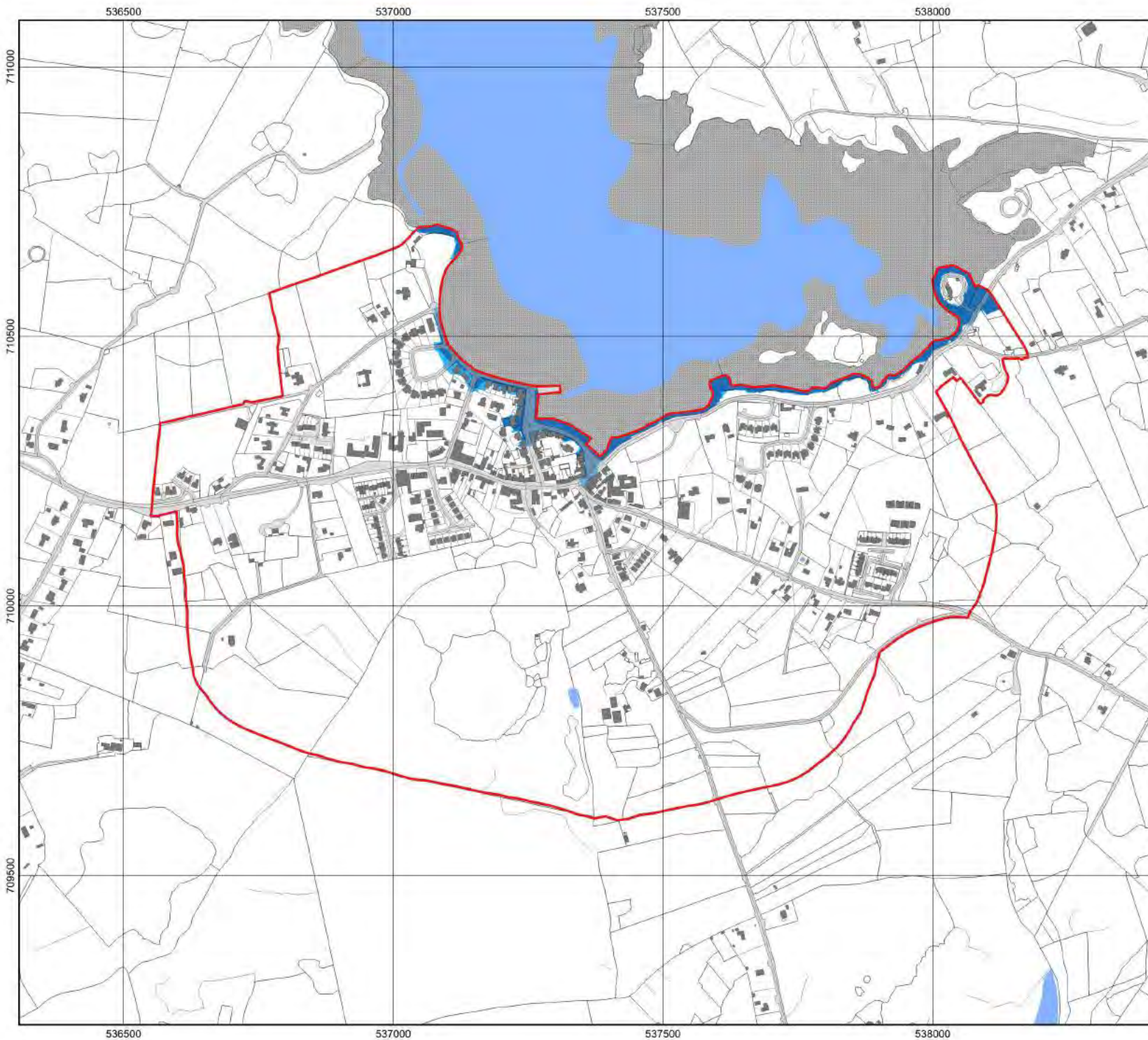
Coordinates in ITM

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**Galway CDP 2022-2028
SFRA
Kinvara
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

Indicative Flood Zones

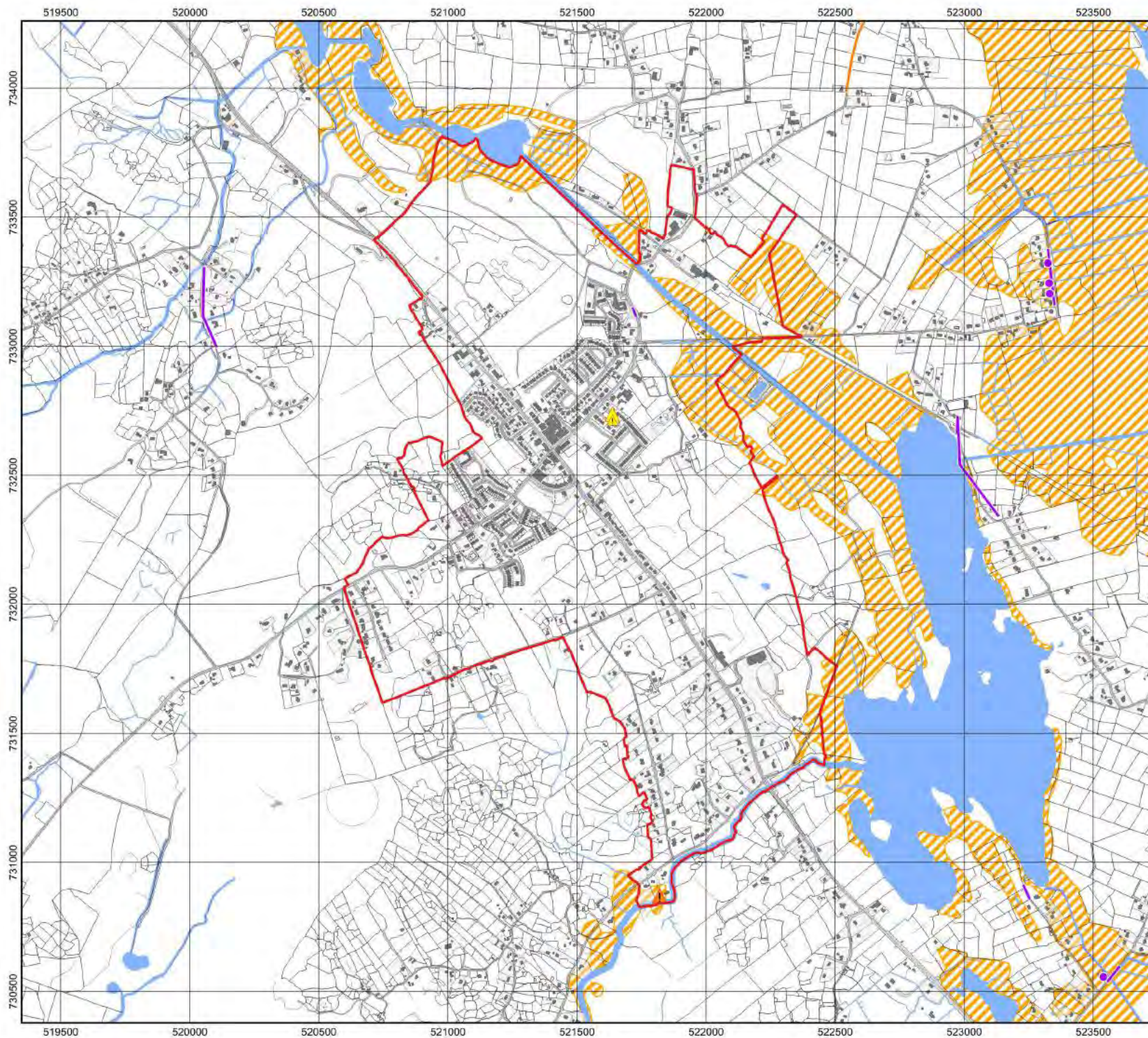
-  Flood Zone A
-  Flood Zone B

Other Zones

-  Possible Turlough
-  Wet lands, not easily drained



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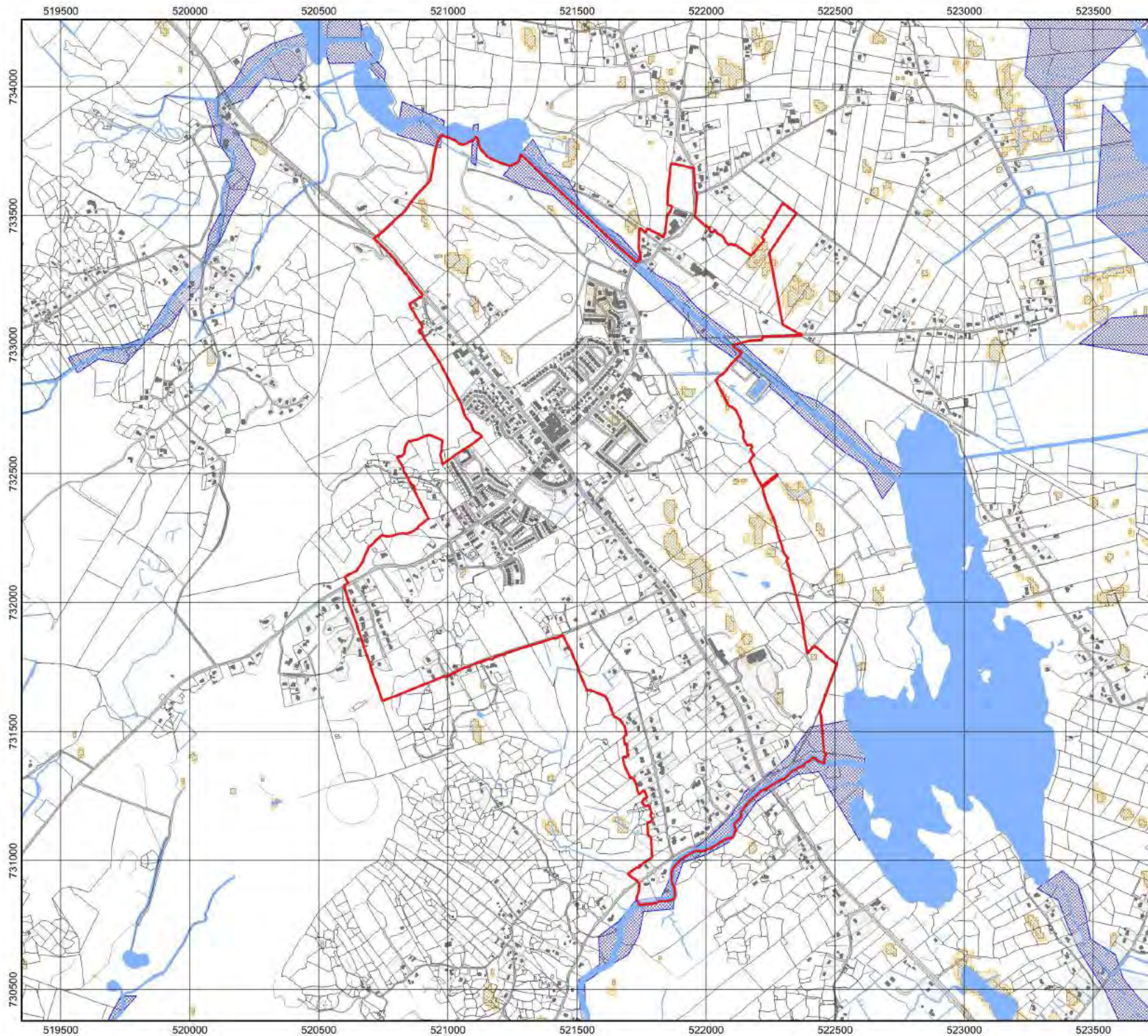


**Galway CDP 2022-2028
SFRA
Maigh Cuilinn
OPW & GCC Historical Indicators**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water
- Arterial Drainage Scheme**
 - Channel
 - Embankment
 - Benefited Land
- Drainage Districts**
 - Channel
 - Embankment
 - Benefited Land
- Land Commission**
 - Benefited Land
- Past Flood Event**
 - Single Flood Event
 - Recurring Flood Event
 - Past Flood Extent
- Galway County Council
Historical Flood Data**
 - Flood Points 2009
 - Road Closures 2009
 - Flooded Houses Dec 2015
 - Flooded Roads Dec 2015
 - GCC Floods 09 Combined Sources





Coordinates in ITM
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**Galway CDP 2022-2028
SFRA
Maigh Cuilinn
OPW Preliminary Flood Risk
Assessment (PFRA)**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



PFRA Fluvial

-  PFRA Fluvial 1% AEP
-  PFRA Fluvial 0.1% AEP

PFRA Pluvial

-  PFRA Pluvial 1% AEP
-  PFRA Pluvial 0.1% AEP

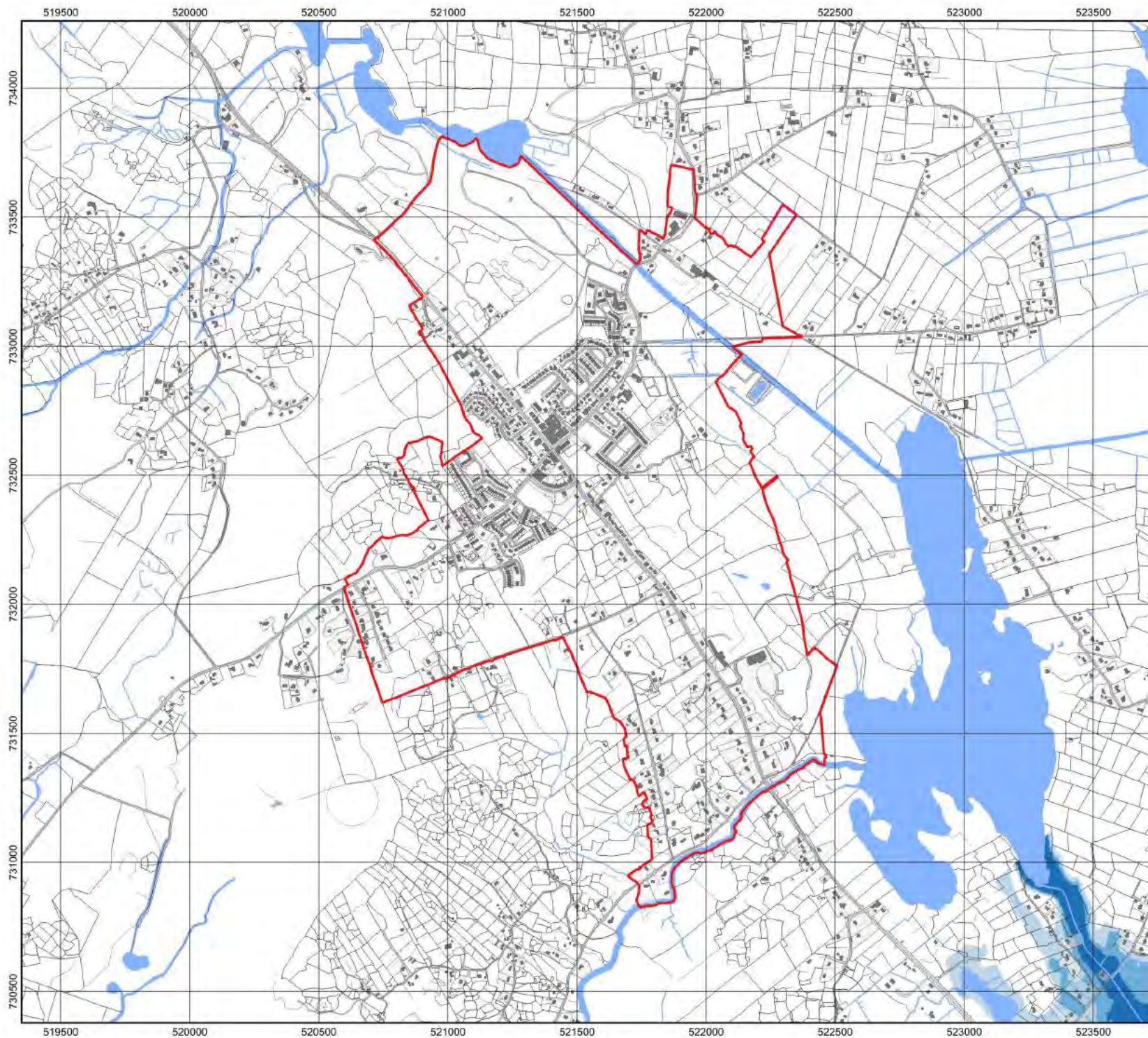
PFRA Coastal

-  PFRA ICPS Coastal 0.5% AEP
-  PFRA ICPS Coastal 0.1% AEP



 **Comhairle Chontae na Gaillimhe
Galway County Council**




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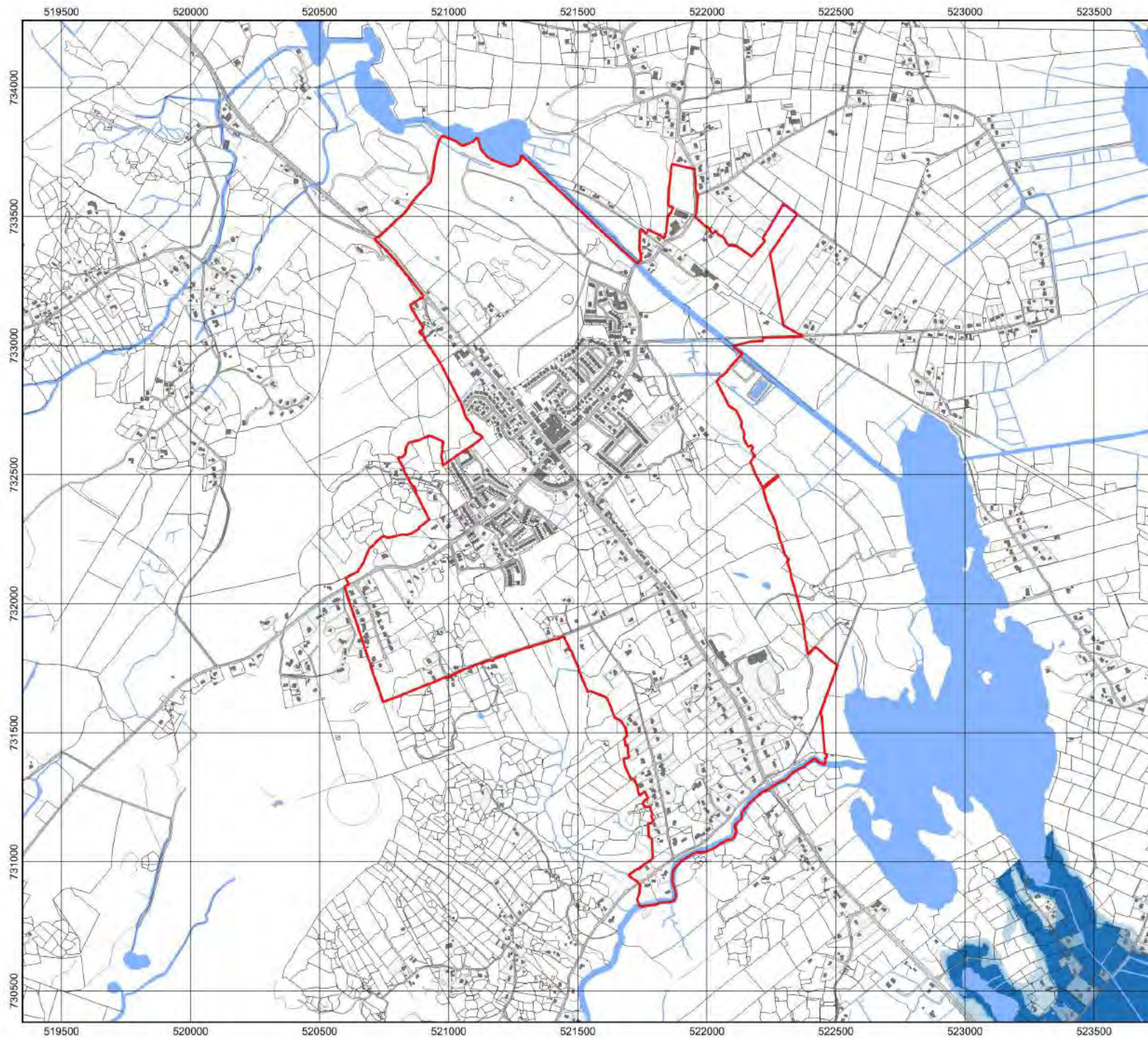
**Galway CDP 2022-2028
SFRA**
Maigh Cuilinn
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water





CFRAM Fluvial and/or Coastal
Present Day Scenario

-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent








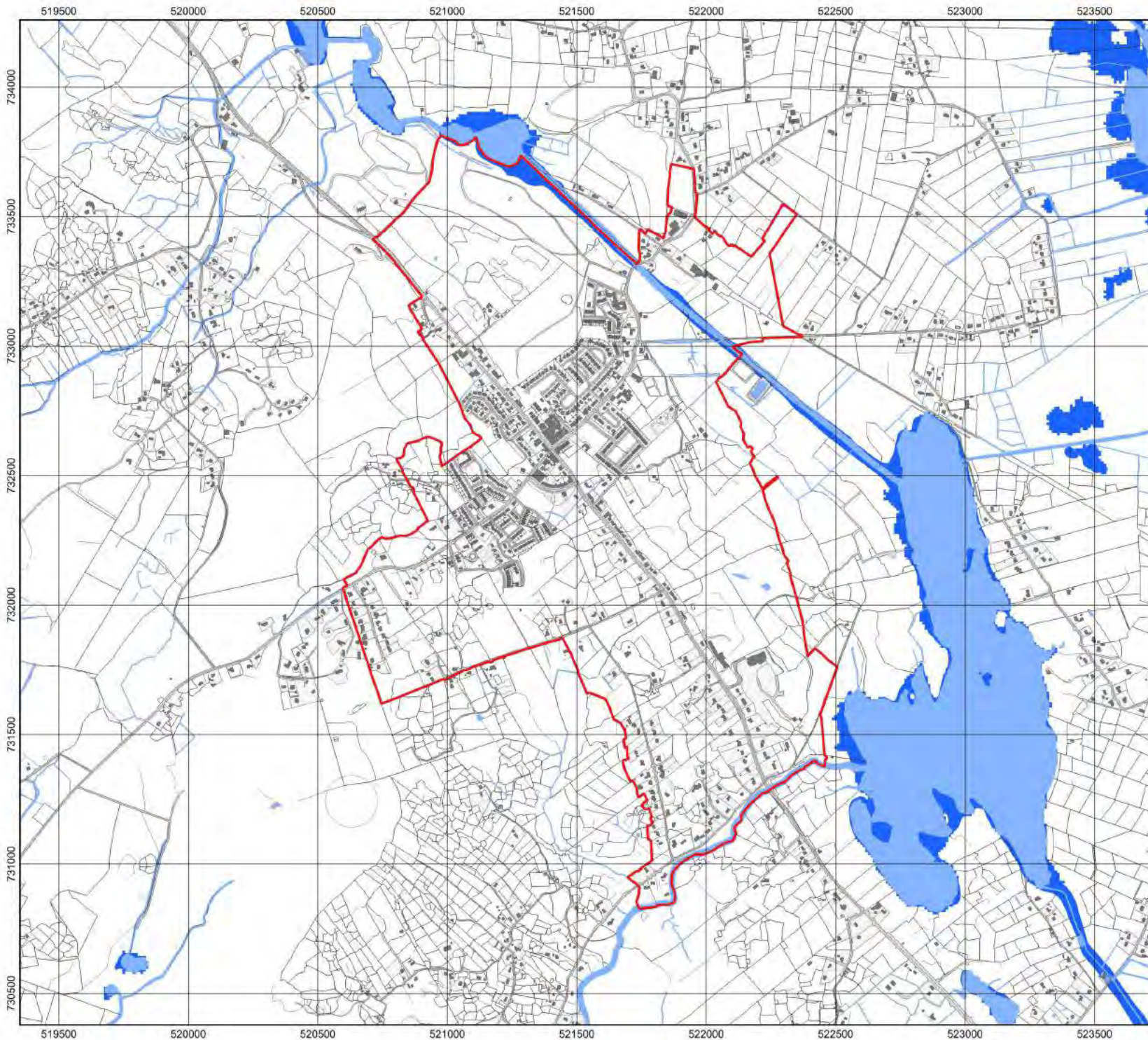
**Galway CDP 2022-2028
SFRA
Maigh Cuilinn
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

***CFRAM Fluvial and/or Coastal
All Scenarios***

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP









**Galway CDP 2022-2028
SFRA
Maigh Cuilinn
GSI Historical Flood Data and
Groundwater Predictive Modeling**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



**GSI Groundwater Flooding
Predictive Model**

-  High Probability
-  Medium Probability
-  Low Probability

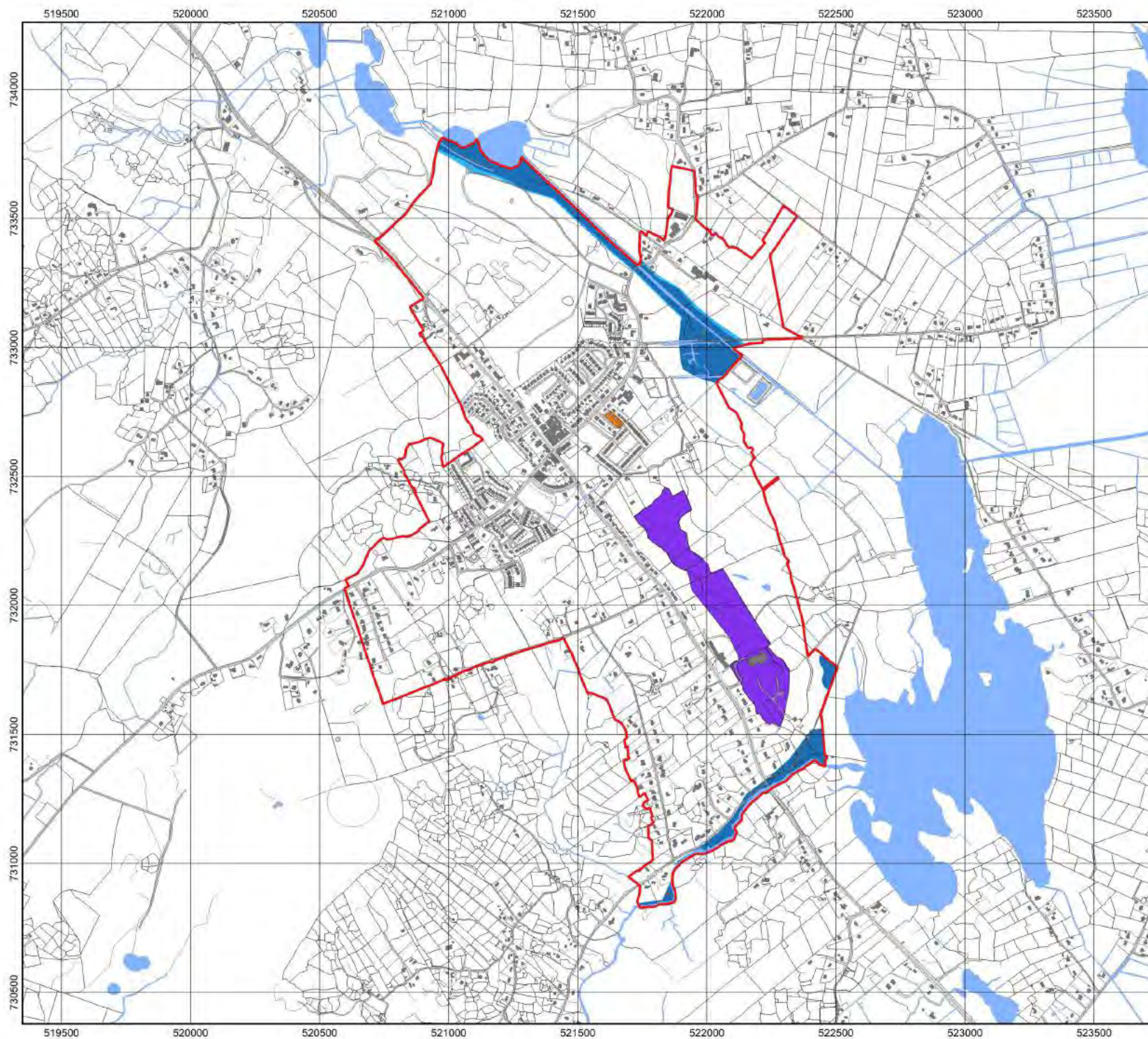
GSI Historical Flood Data

-  Winter 2015-2016
Surface Water Flooding

**Maximum Historic Groundwater
Flooding**

-  Groundwater
-  Groundwater/Surface water







**Galway CDP 2022-2028
SFRA
Maigh Culinn
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

Indicative Flood Zones

-  Flood Zone A
-  Flood Zone B

Other Zones

-  Possible Turlough
-  Wet lands, not easily drained



562000

562500

563000

749000





748500

562000




562500

563000




**Galway CDP 2022-2028
SFRA
Moylough
OPW & GCC Historical Indicators**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water


Arterial Drainage Scheme

-  Channel
-  Embankment
-  Benefited Land




Drainage Districts

-  Channel
-  Embankment
-  Benefited Land

Land Commission






-  Benefited Land

Past Flood Event

-  Single Flood Event
-  Recurring Flood Event
-  Past Flood Extent

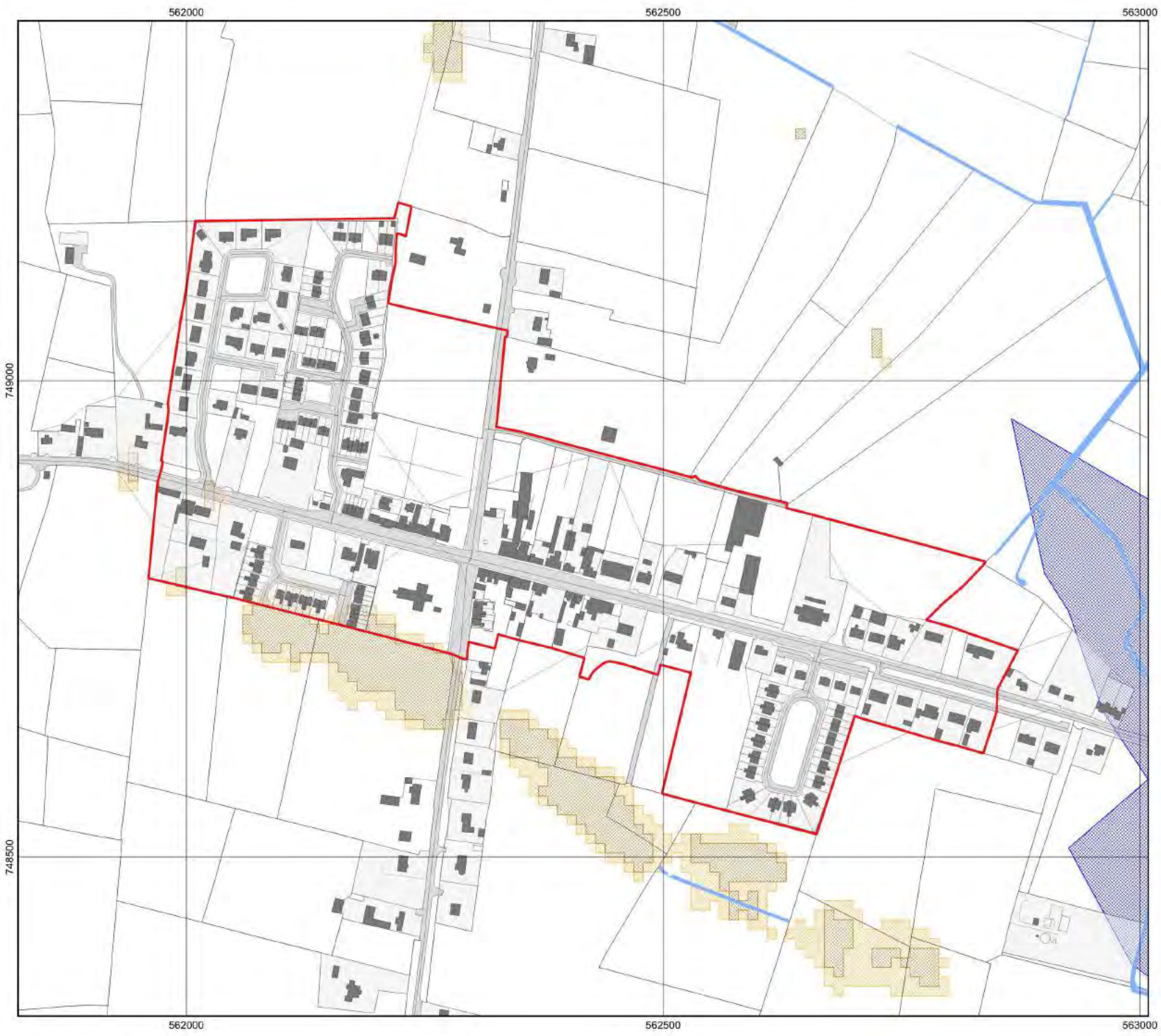
Galway County Council

Historical Flood Data

-  Flood Points 2009
-  Road Closures 2009
-  Flooded Houses Dec 2015
-  Flooded Roads Dec 2015
-  GCC Floods 09 Combined Sources



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**Galway CDP 2022-2028
SFRA
Moylough
OPW Preliminary Flood Risk
Assessment (PFRA)**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water
- PFRA Fluvial**
 -  PFRA Fluvial 1% AEP
 -  PFRA Fluvial 0.1% AEP
- PFRA Pluvial**
 -  PFRA Pluvial 1% AEP
 -  PFRA Pluvial 0.1% AEP
- PFRA Coastal**
 -  PFRA ICPS Coastal 0.5% AEP
 -  PFRA ICPS Coastal 0.1% AEP



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562000

562500

563000

748500

748500

562000




562500

563000

**Galway CDP 2022-2028
SFRA
Moylough
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
Present Day Scenario**

-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent



**Comhairle Chontae na Gaillimhe
Galway County Council**

Coordinates in ITM

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**Galway CDP 2022-2028
SFRA**
Moylough
**OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
All Scenarios**

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP



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**Galway CDP 2022-2028
SFRA
Moylough
GSI Historical Flood Data and
Groundwater Predictive Modeling**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



**GSI Groundwater Flooding
Predictive Model**

-  High Probability
-  Medium Probability
-  Low Probability

GSI Historical Flood Data

-  Winter 2015-2016
Surface Water Flooding

**Maximum Historic Groundwater
Flooding**

-  Groundwater
-  Groundwater/Surface water



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562000

562500

563000

749000

748500

562000

562500

563000



**Galway CDP 2022-2028
SFRA
Moylough
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

Indicative Flood Zones

-  Flood Zone A
-  Flood Zone B

Other Zones

-  Possible Turlough
-  Wet lands, not easily drained



**Comhairle Chontae na Gaillimhe
Galway County Council**

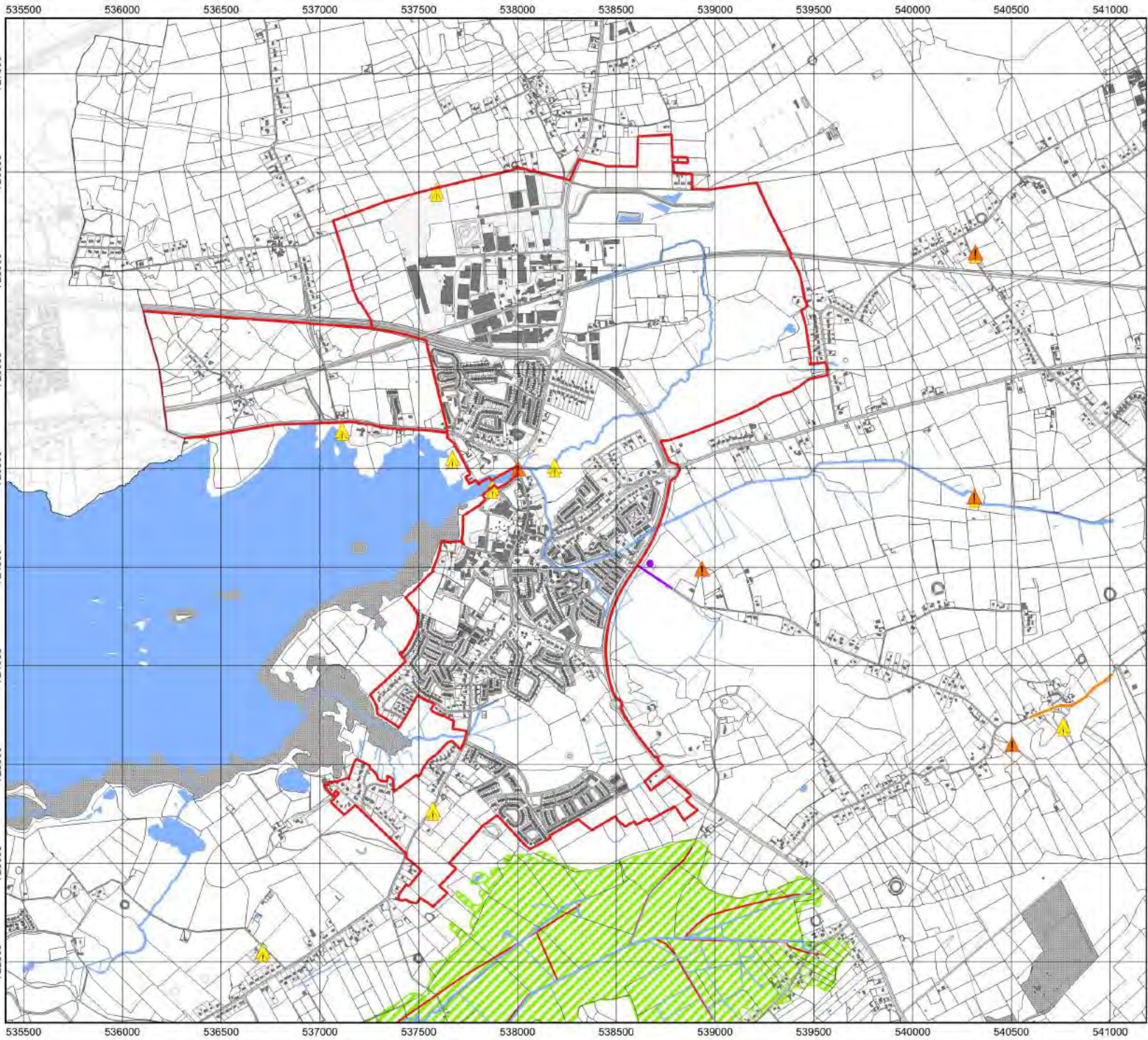
Coordinates in ITM

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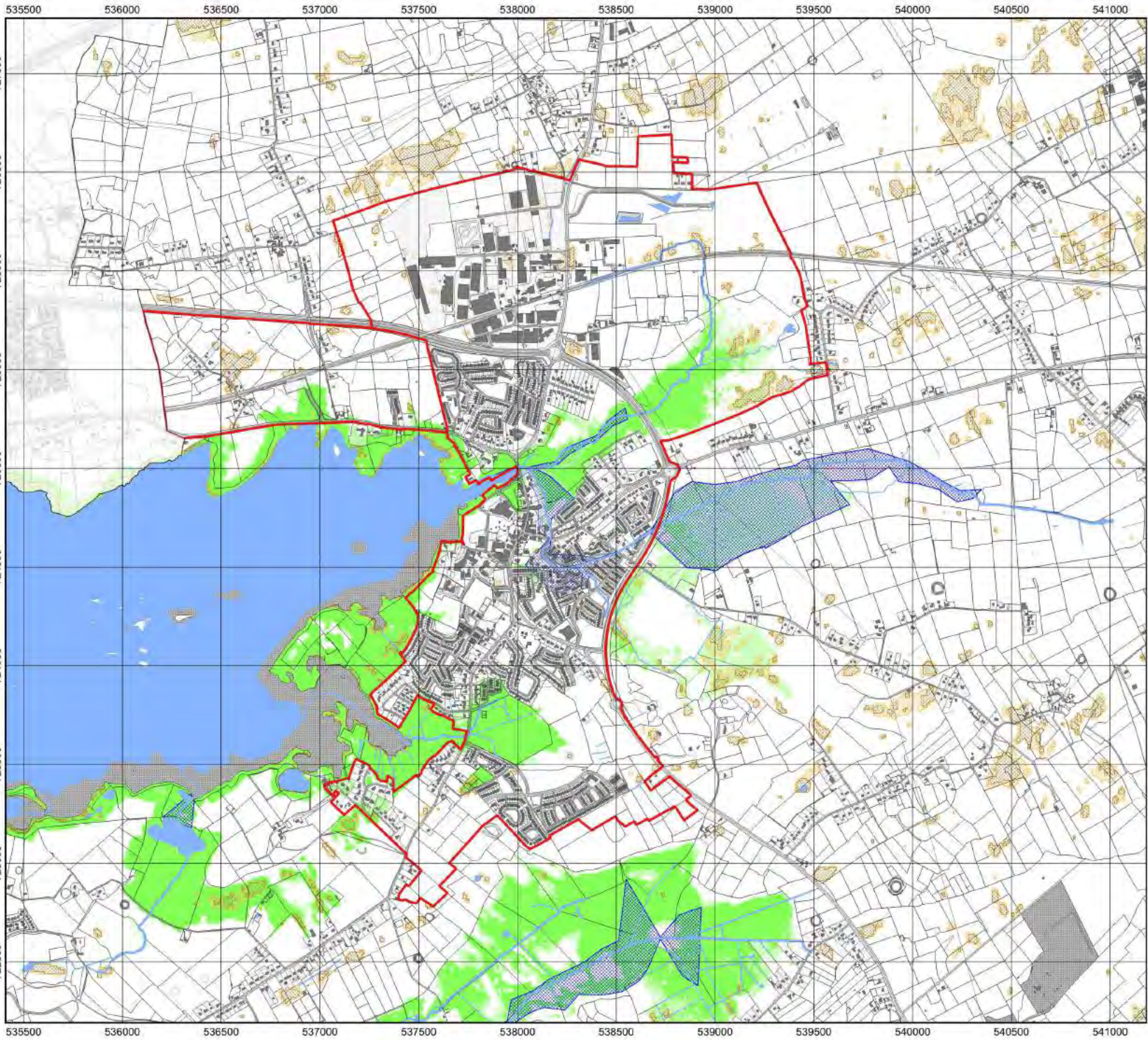
Galway SFRA Appendix II Page 90



**Galway CDP 2022-2028
SFRA
Oranmore
OPW & GCC Historical Indicators**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water
- Arterial Drainage Scheme**
 - Channel
 - Embankment
 - Benefited Land
- Drainage Districts**
 - Channel
 - Embankment
 - Benefited Land
- Land Commission**
 - Benefited Land
- Past Flood Event**
 - Single Flood Event
 - Recurring Flood Event
 - Past Flood Extent
- Galway County Council
Historical Flood Data**
 - Flood Points 2009
 - Road Closures 2009
 - Flooded Houses Dec 2015
 - Flooded Roads Dec 2015
 - GCC Floods 09 Combined Sources









**Galway CDP 2022-2028
SFRA
Oranmore
OPW Preliminary Flood Risk
Assessment (PFRA)**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



PFRA Fluvial

-  PFRA Fluvial 1% AEP
-  PFRA Fluvial 0.1% AEP

PFRA Pluvial

-  PFRA Pluvial 1% AEP
-  PFRA Pluvial 0.1% AEP

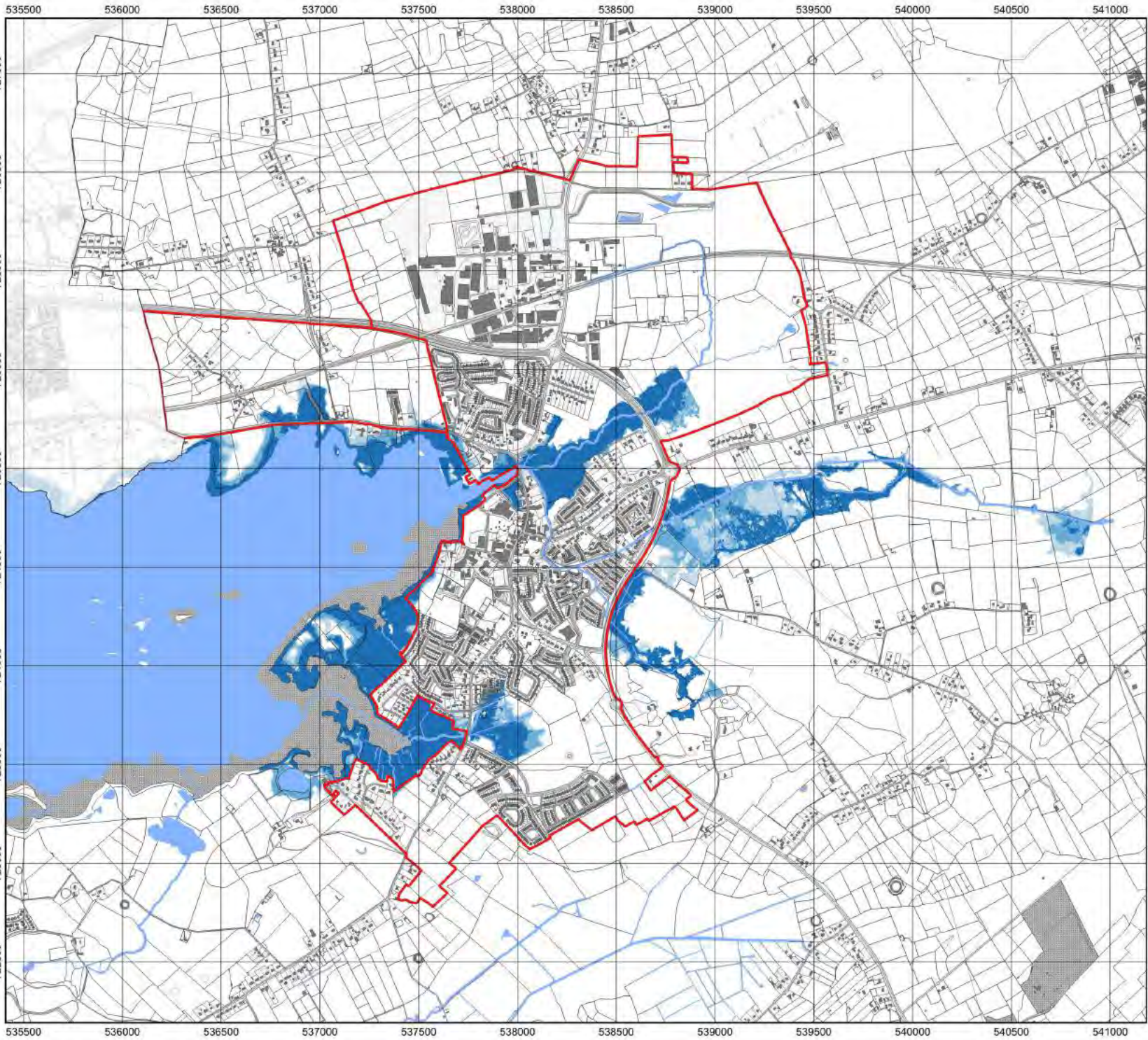
PFRA Coastal

-  PFRA ICPS Coastal 0.5% AEP
-  PFRA ICPS Coastal 0.1% AEP



 **Comhairle Chontae na Gaillimhe
Galway County Council**




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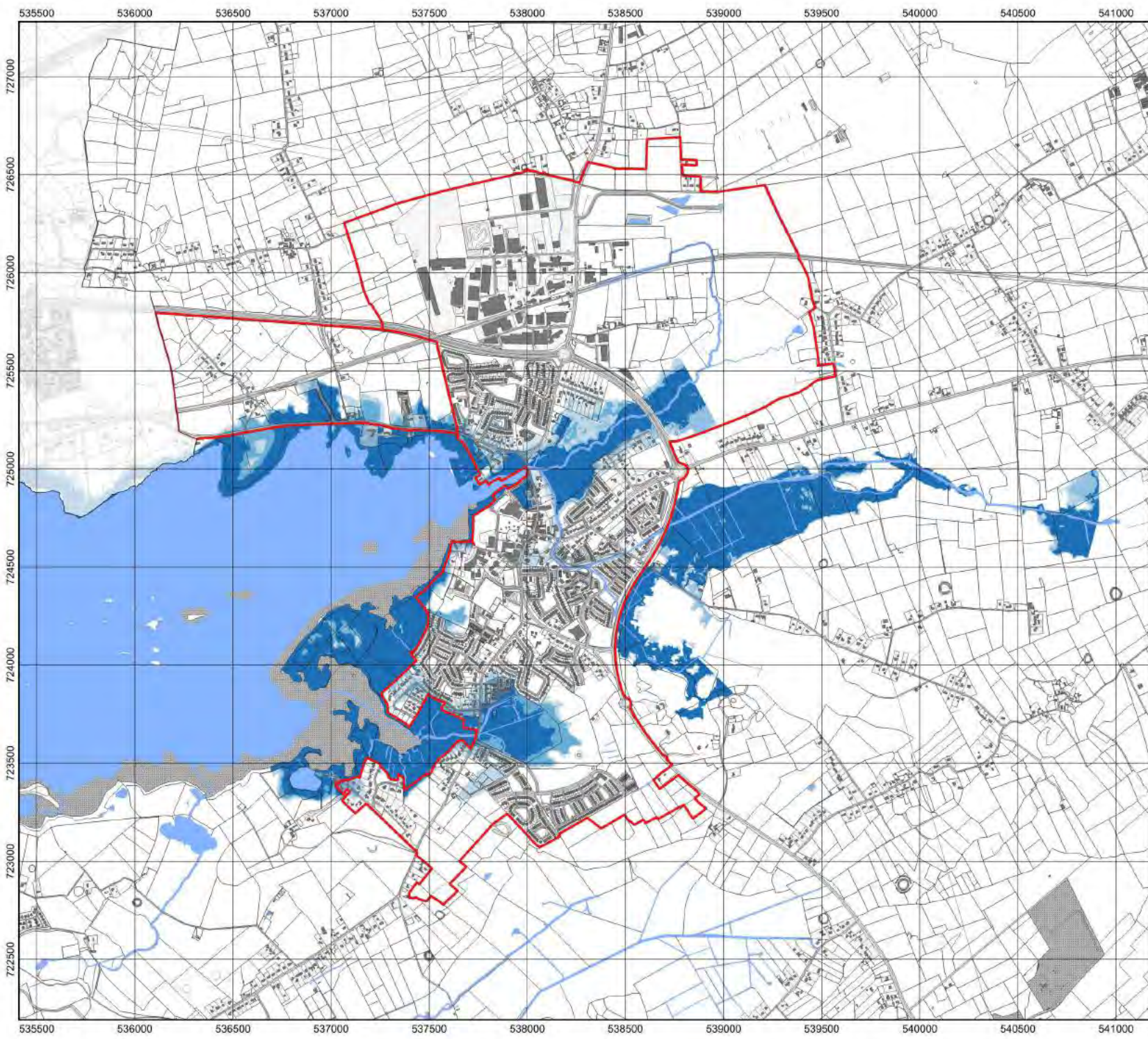
**Galway CDP 2022-2028
SFRA
Oranmore
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water





***CFRAM Fluvial and/or Coastal
Present Day Scenario***

-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent








**Galway CDP 2022-2028
SFRA
Oranmore
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

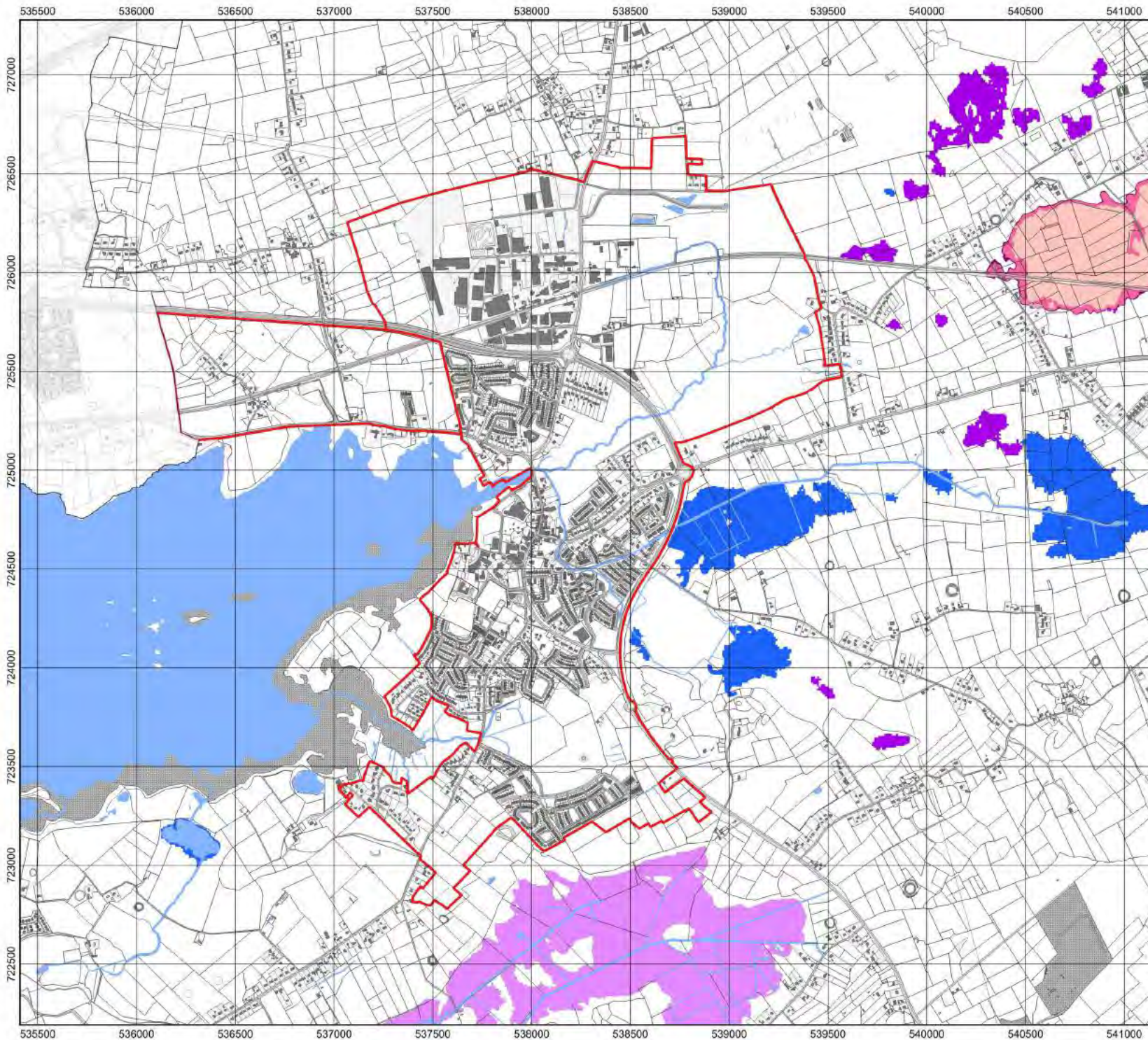
***CFRAM Fluvial and/or Coastal
All Scenarios***

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP



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Galway County Council**



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**Galway CDP 2022-2028
SFRA
Oranmore
GSI Historical Flood Data and
Groundwater Predictive Modeling**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



**GSI Groundwater Flooding
Predictive Model**

-  High Probability
-  Medium Probability
-  Low Probability

GSI Historical Flood Data

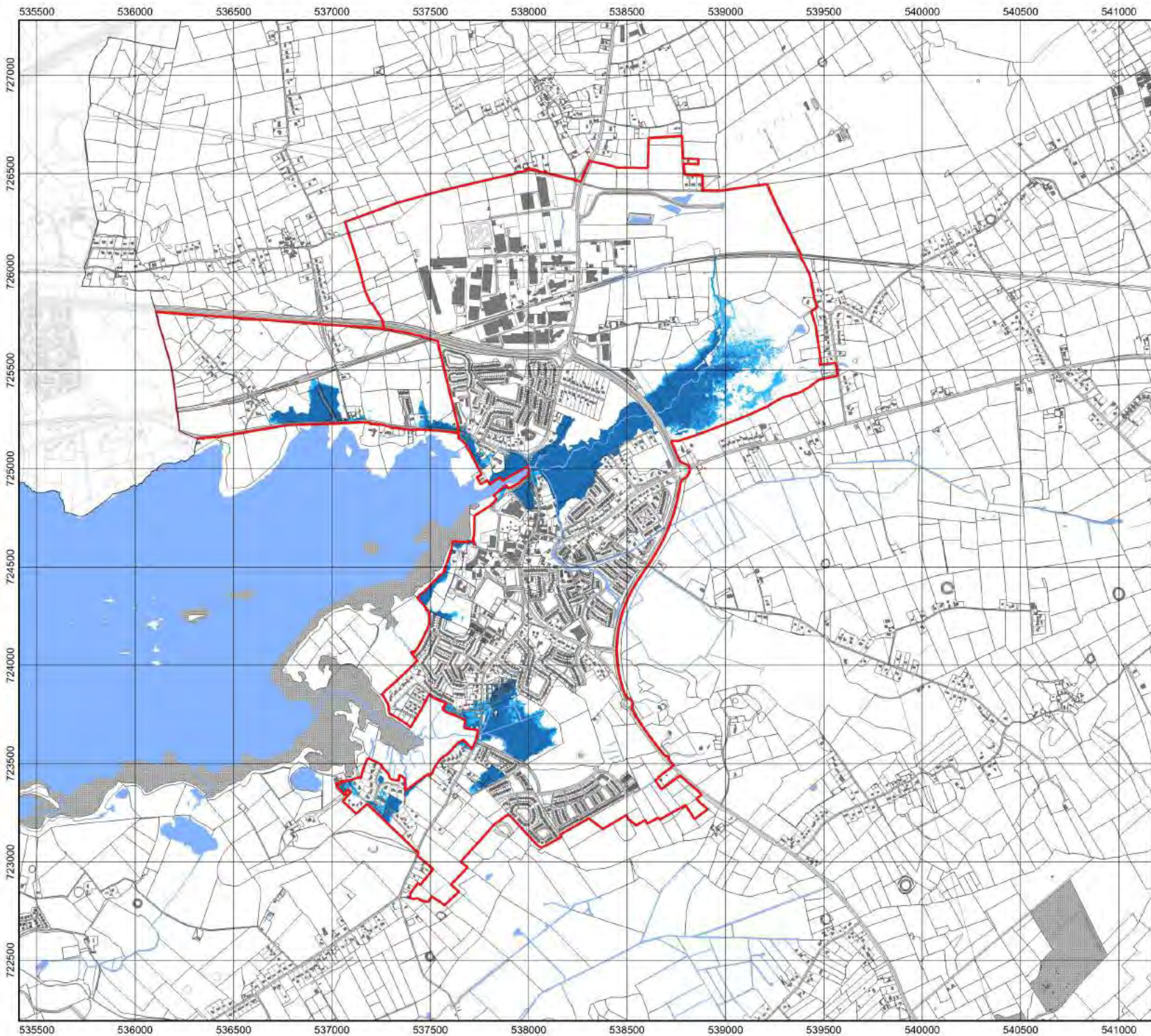
-  Winter 2015-2016
Surface Water Flooding

**Maximum Historic Groundwater
Flooding**

-  Groundwater
-  Groundwater/Surface water



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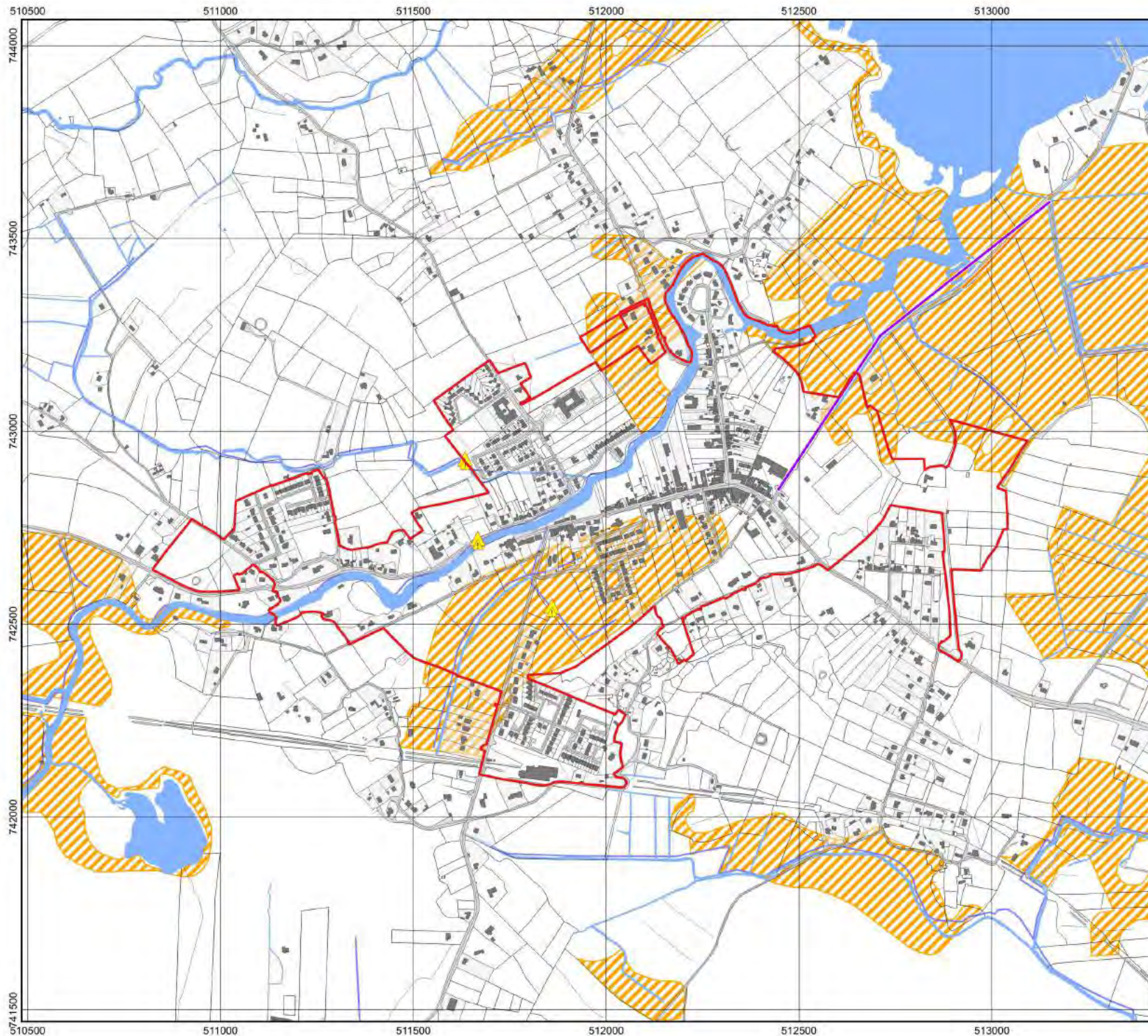
**Galway CDP 2022-2028
SFRA
Oranmore
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water
- Indicative Flood Zones**
-  Flood Zone A
-  Flood Zone B
- Other Zones**
-  Possible Turlough
-  Wet lands, not easily drained



 **Comhairle Chontae na Gaillimhe
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**Galway CDP 2022-2028
SFRA
Oughterard
OPW & GCC Historical Indicators**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

- Arterial Drainage Scheme**
-  Channel
-  Embankment
-  Benefited Land

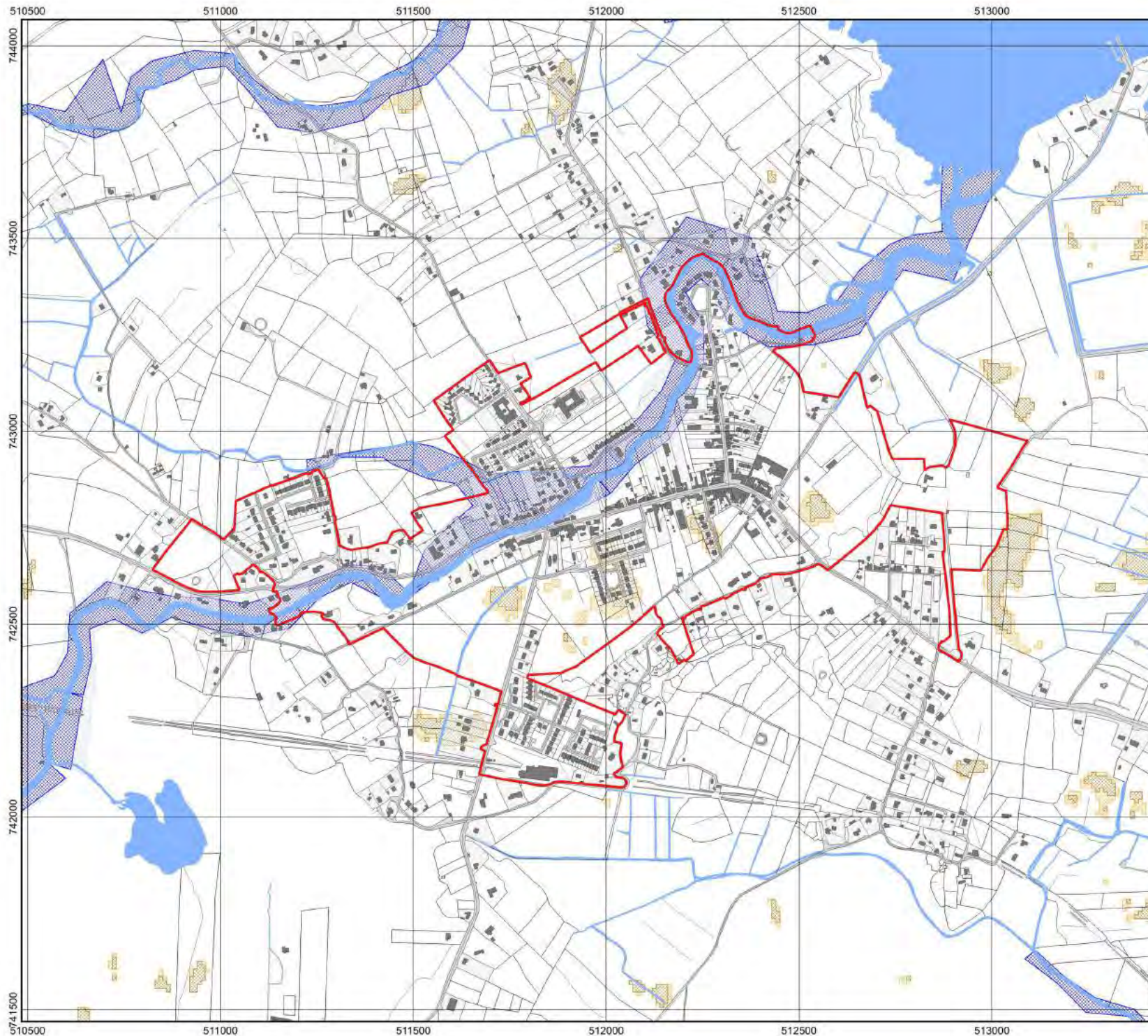
- Drainage Districts**
-  Channel
-  Embankment
-  Benefited Land

- Land Commission**
-  Benefited Land

- Past Flood Event**
-  Single Flood Event
-  Recurring Flood Event
-  Past Flood Extent

- Galway County Council
Historical Flood Data**
-  Flood Points 2009
-  Road Closures 2009
-  Flooded Houses Dec 2015
-  Flooded Roads Dec 2015
-  GCC Floods 09 Combined Sources





**Galway CDP 2022-2028
SFRA
Oughterard
OPW Preliminary Flood Risk
Assessment (PFRA)**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

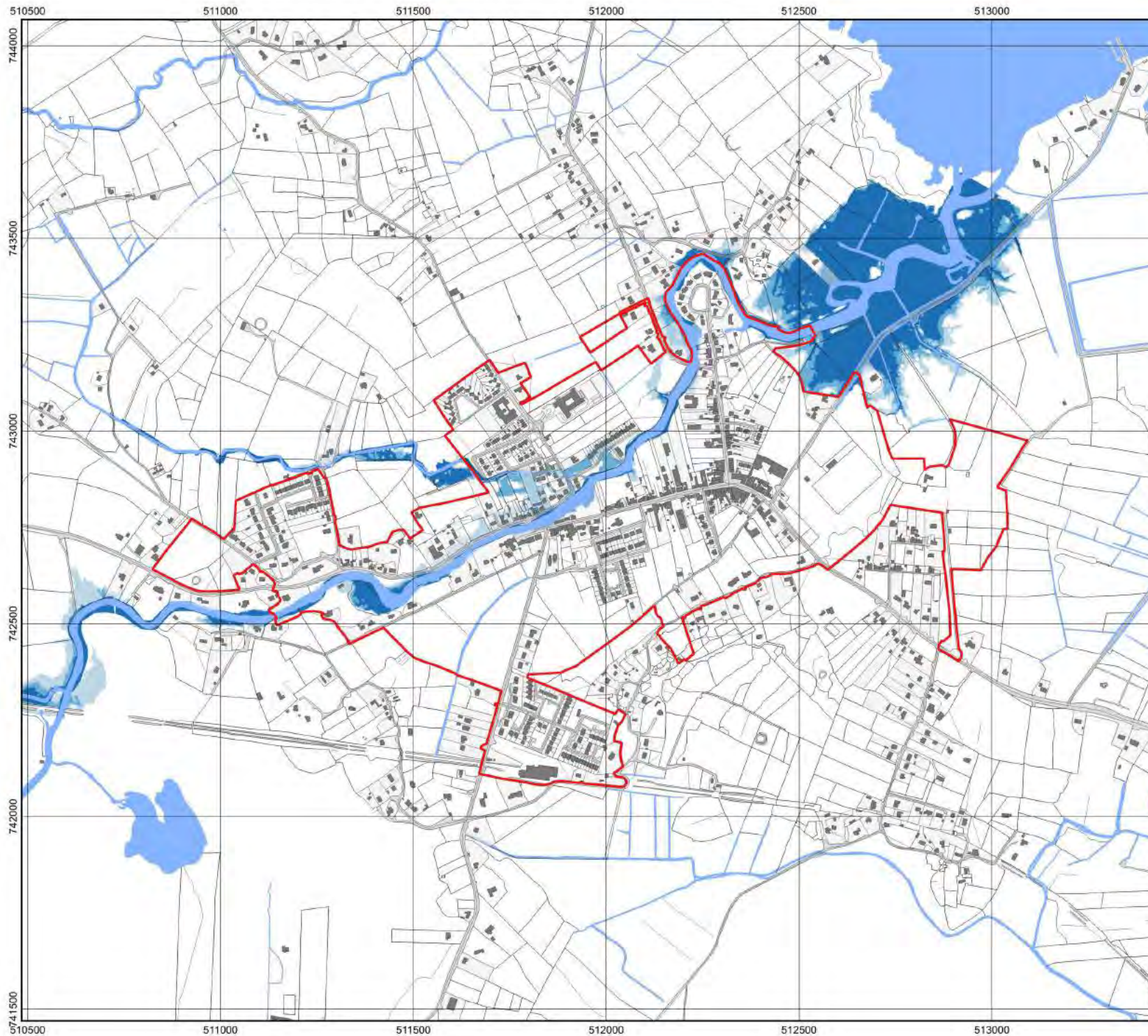
- PFRA Fluvial**
-  PFRA Fluvial 1% AEP
-  PFRA Fluvial 0.1% AEP

- PFRA Pluvial**
-  PFRA Pluvial 1% AEP
-  PFRA Pluvial 0.1% AEP

- PFRA Coastal**
-  PFRA ICPSS Coastal 0.5% AEP
-  PFRA ICPSS Coastal 0.1% AEP






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**Galway CDP 2022-2028
SFRA
Oughterard
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario**

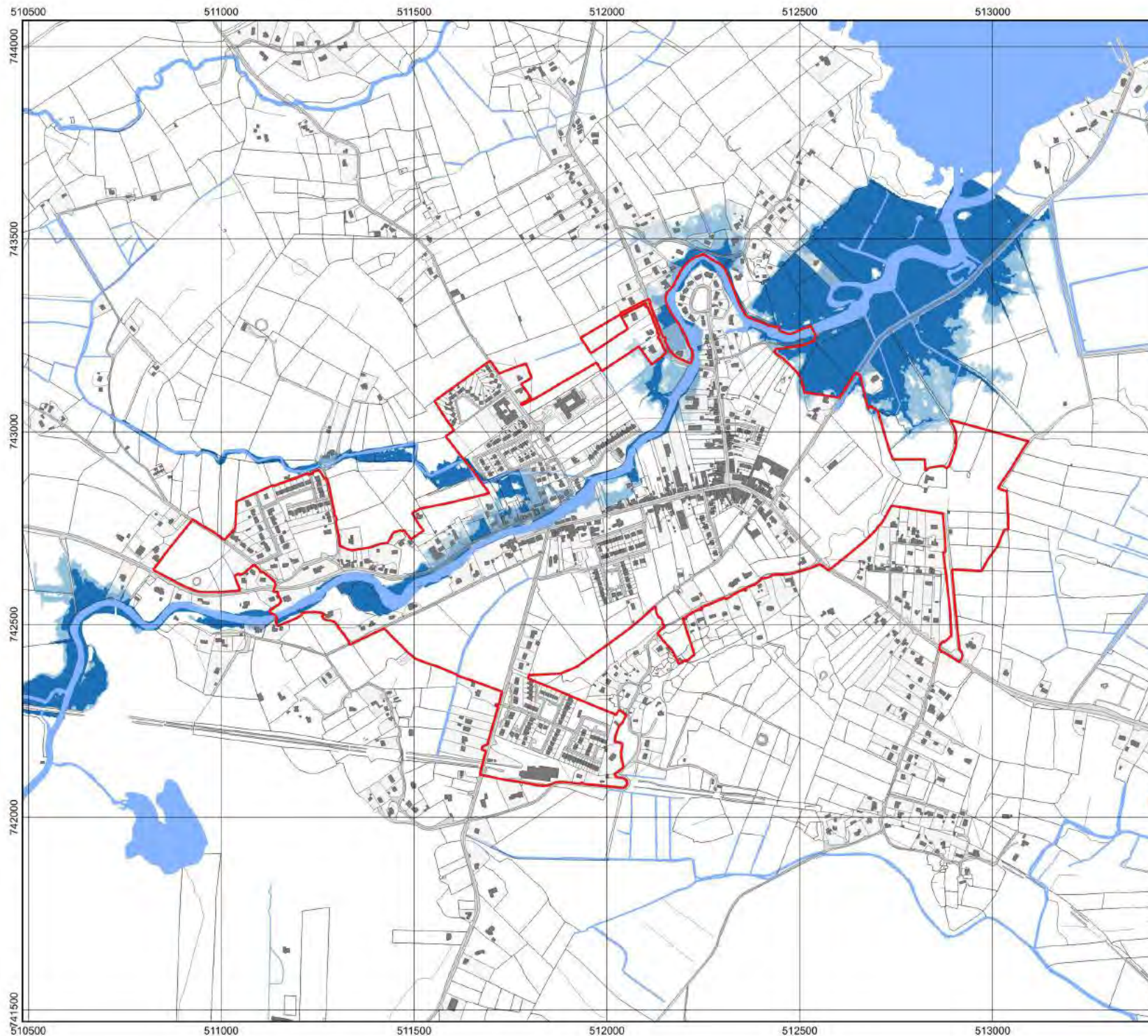
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

***CFRAM Fluvial and/or Coastal
Present Day Scenario***




-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent






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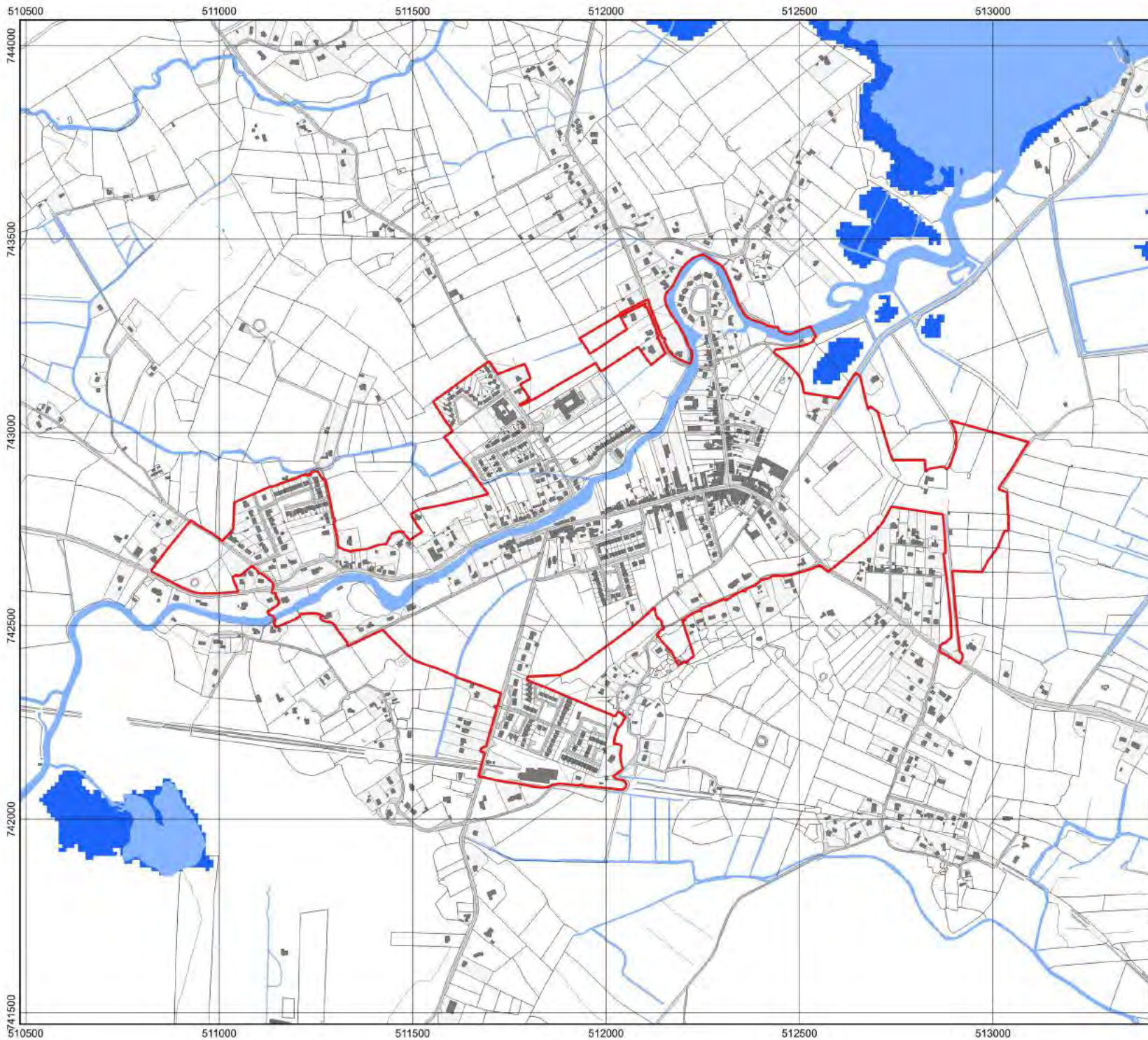
**Galway CDP 2022-2028
SFRA
Oughterard
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

***CFRAM Fluvial and/or Coastal
All Scenarios***

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP









**Galway CDP 2022-2028
SFRA
Oughterard
GSI Historical Flood Data and
Groundwater Predictive Modeling**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



**GSI Groundwater Flooding
Predictive Model**

-  High Probability
-  Medium Probability
-  Low Probability

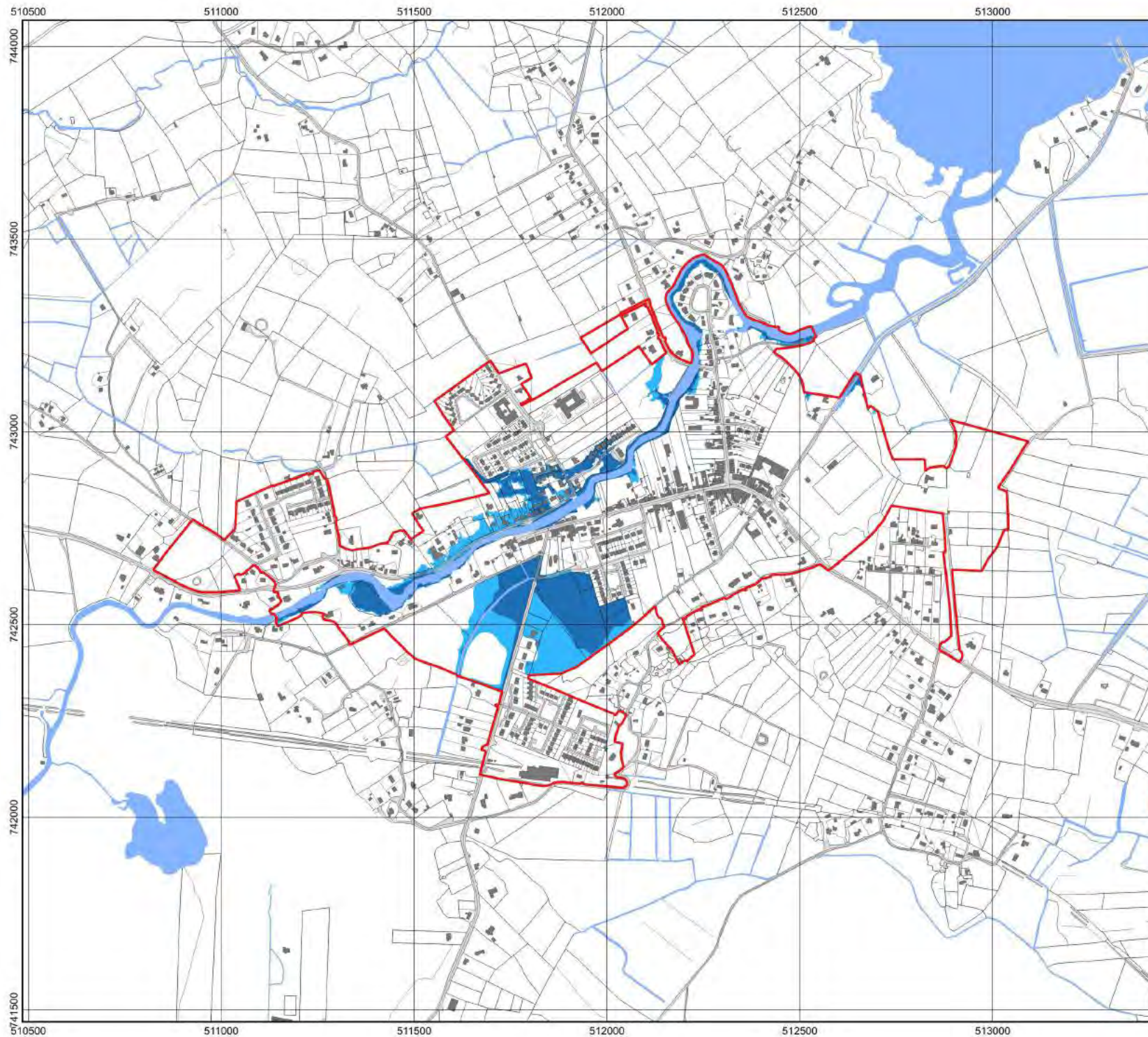
GSI Historical Flood Data

-  Winter 2015-2016
Surface Water Flooding



**Maximum Historic Groundwater
Flooding**

-  Groundwater
-  Groundwater/Surface water







**Galway CDP 2022-2028
SFRA
Oughterard
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

Indicative Flood Zones

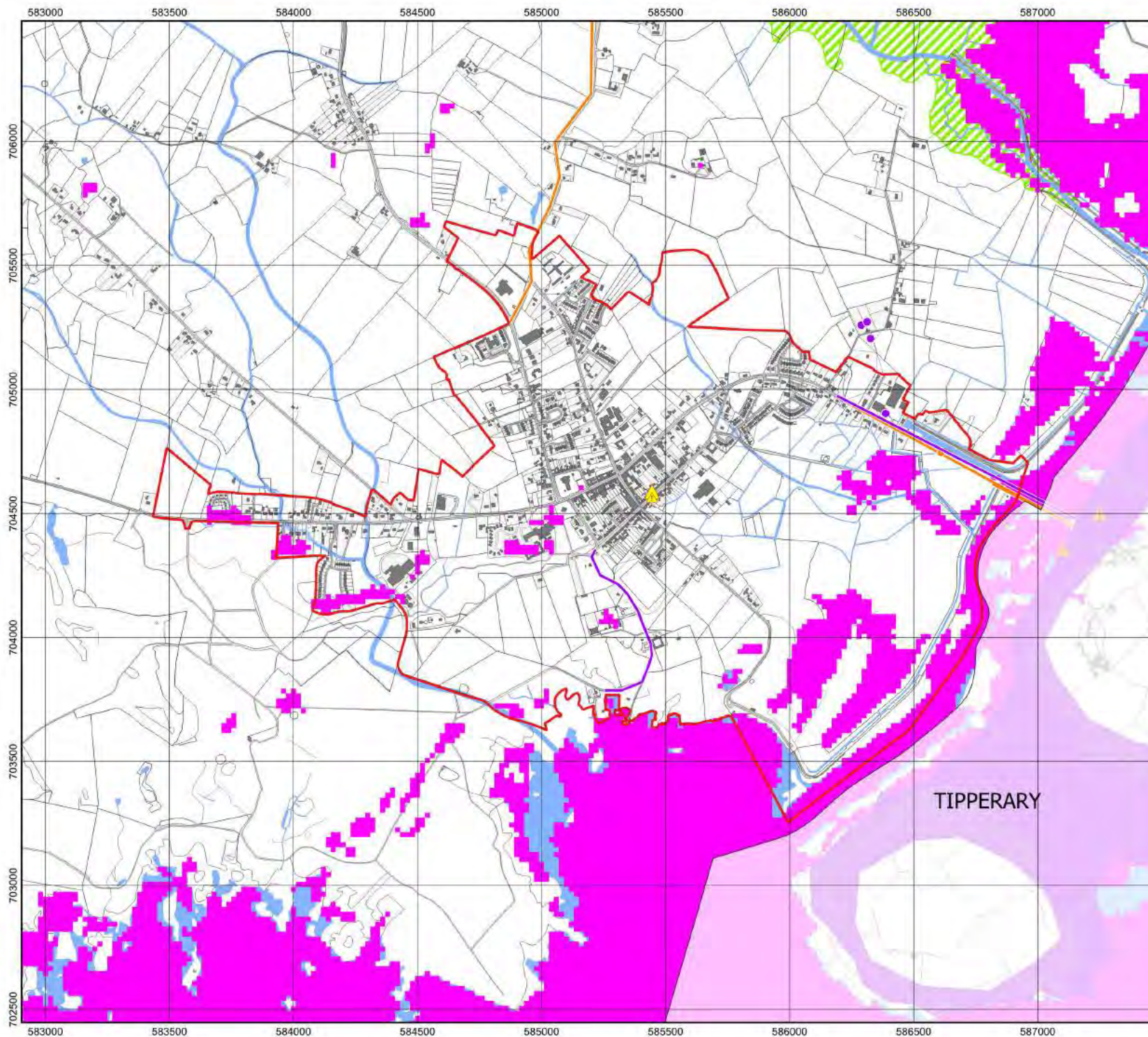
-  Flood Zone A
-  Flood Zone B

Other Zones

-  Possible Turlough
-  Wet lands, not easily drained



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**Galway CDP 2022-2028
SFRA
Portumna
OPW & GCC Historical Indicators**

- Administrative Area
- Settlement Boundary
- River or Stream
- Water

Arterial Drainage Scheme

- Channel
- Embankment
- Benefited Land

Drainage Districts

- Channel
- Embankment
- Benefited Land

Land Commission

- Benefited Land

Past Flood Event

- Single Flood Event
- Recurring Flood Event
- Past Flood Extent

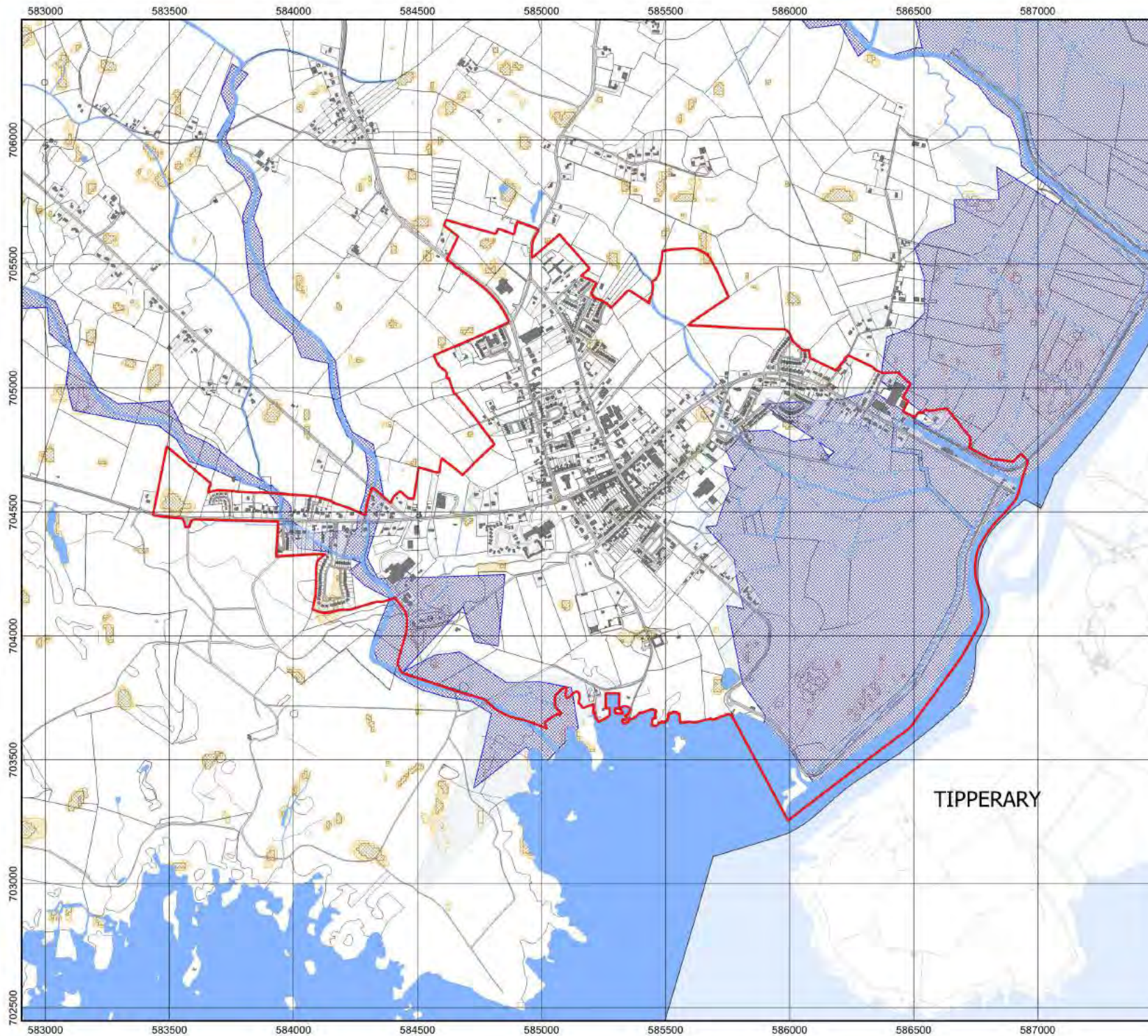
Galway County Council

Historical Flood Data

- Flood Points 2009
- Road Closures 2009
- Flooded Houses Dec 2015
- Flooded Roads Dec 2015
- GCC Floods 09 Combined Sources





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**Galway CDP 2022-2028
SFRA
Portumna
OPW Preliminary Flood Risk
Assessment (PFRA)**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



PFRA Fluvial

-  PFRA Fluvial 1% AEP
-  PFRA Fluvial 0.1% AEP

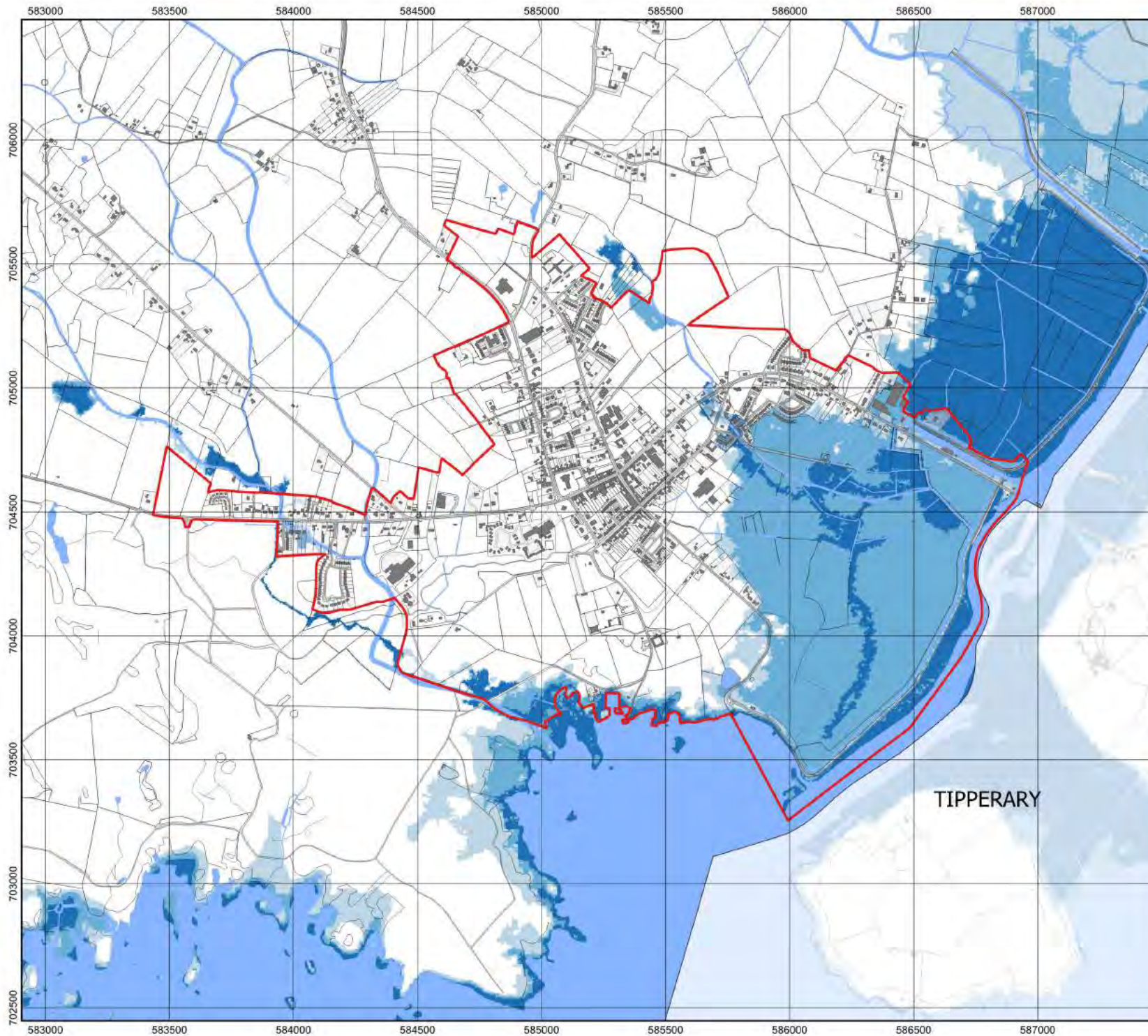
PFRA Pluvial

-  PFRA Pluvial 1% AEP
-  PFRA Pluvial 0.1% AEP

PFRA Coastal

-  PFRA ICPSS Coastal 0.5% AEP
-  PFRA ICPSS Coastal 0.1% AEP








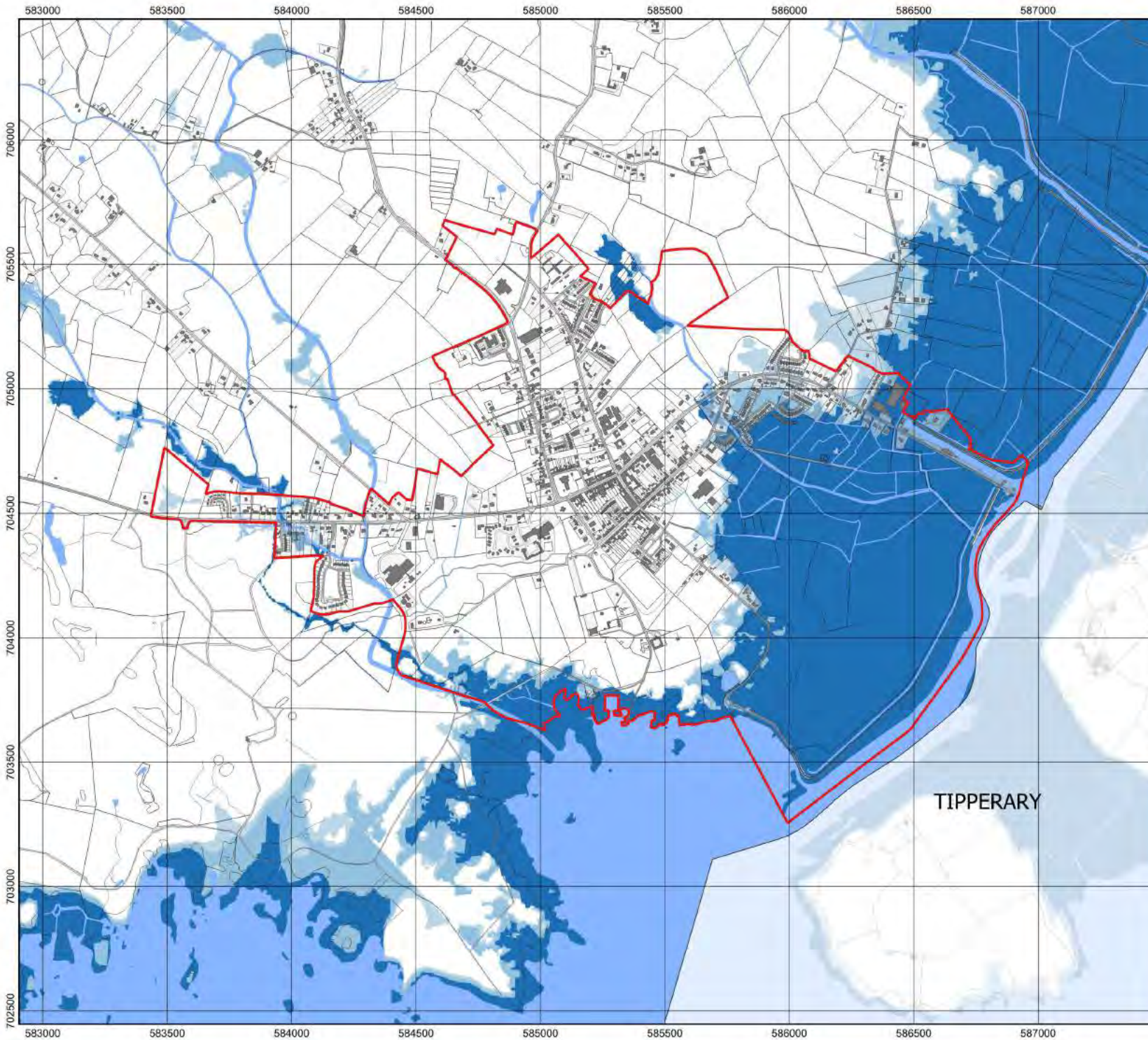
**Galway CDP 2022-2028
SFRA**
**Portumna
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) Present Day Scenario**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
Present Day Scenario**

-  10% AEP Fluvial Extent
-  1% AEP Fluvial Extent
-  0.1% AEP Fluvial Extent








**Galway CDP 2022-2028
SFRA**
**Portumna
OPW Catchment Flood Risk
Assesment & Management
(CFRAM) All Scenarios**

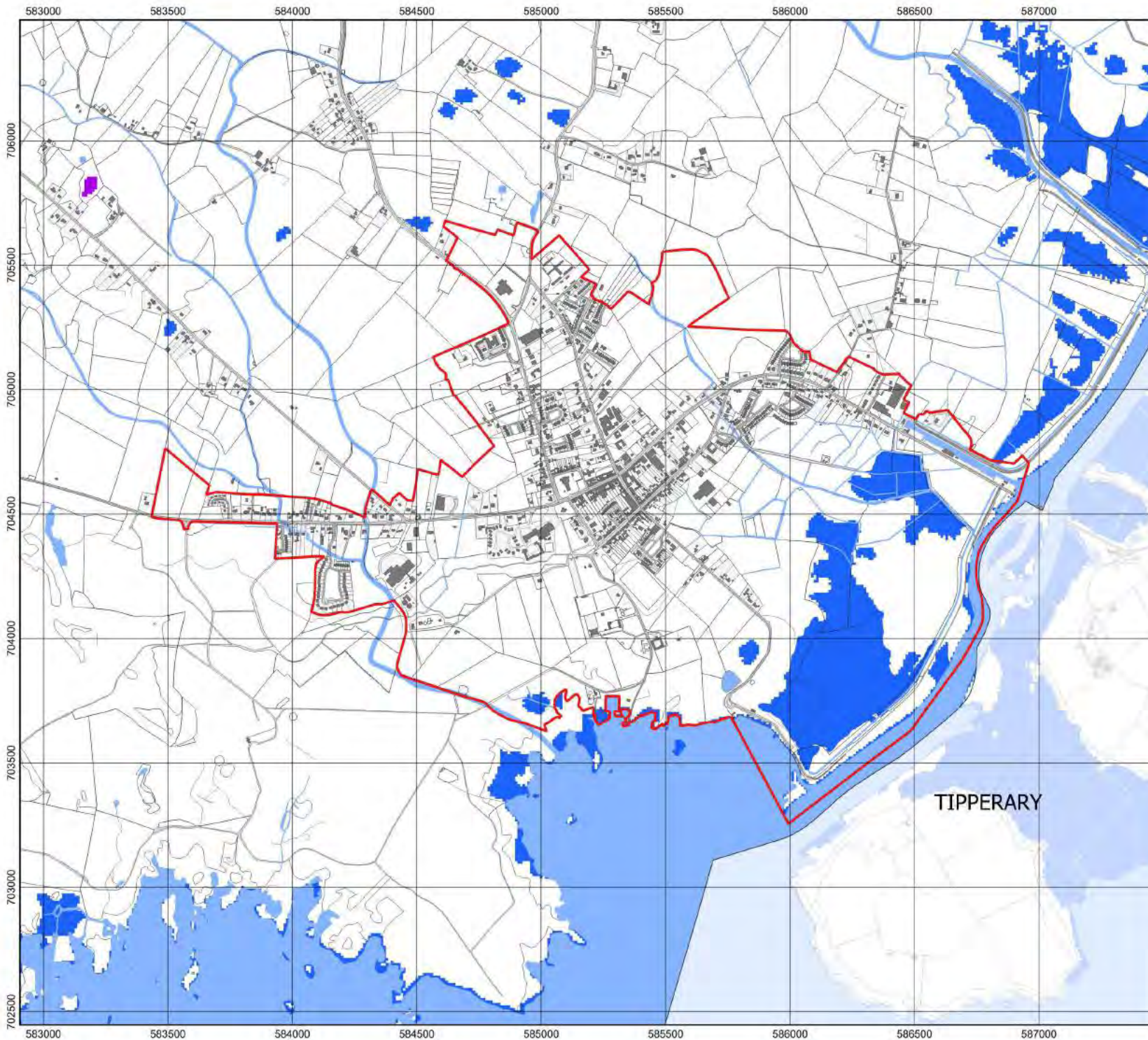
-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

**CFRAM Fluvial and/or Coastal
All Scenarios**

-  Present Day Scenario 0.1% AEP
-  Mid-Range Future Scenario 0.1% AEP
-  High-End Future Scenario 0.1% AEP

TIPPERARY









**Galway CDP 2022-2028
SFRA
Portumna
GSI Historical Flood Data and
Groundwater Predictive Modeling**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water



**GSI Groundwater Flooding
Predictive Model**

-  High Probability
-  Medium Probability
-  Low Probability

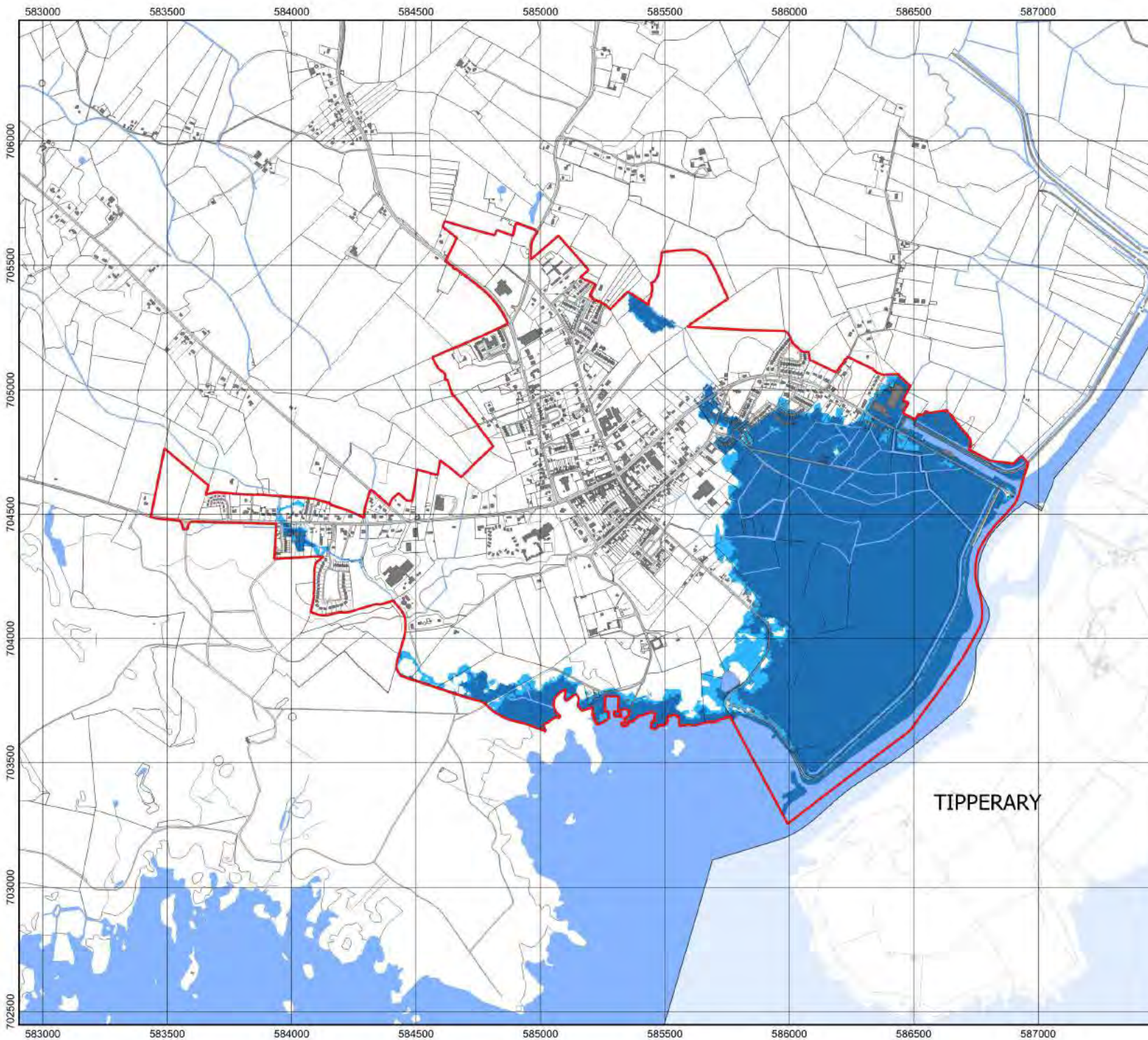
GSI Historical Flood Data

-  Winter 2015-2016
Surface Water Flooding

**Maximum Historic Groundwater
Flooding**

-  Groundwater
-  Groundwater/Surface water







**Galway CDP 2022-2028
SFRA
Portumna
Flood Zones**

-  Administrative Area
-  Settlement Boundary
-  River or Stream
-  Water

Indicative Flood Zones

-  Flood Zone A
-  Flood Zone B

Other Zones

-  Possible Turlough
-  Wet lands, not easily drained



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