

# RIVER TAMAR

(Not Tavy and Lynher)

## CATCHMENT

## ACTION

## PLAN



NRA

*National Rivers Authority  
South West Region*

C O N T E N T S

MAP OF NRA SW REGION SHOWING TARGET CATCHMENT

- |    |                               |            |
|----|-------------------------------|------------|
| 1. | INTRODUCTION                  | PAGE 1     |
| 2. | ROUTINE SERVICES              | PAGE 1 - 2 |
| 3. | CHALLENGES & PROPOSED ACTIONS | PAGE 3     |

APPENDIX 1 - CATCHMENT MAPS

APPENDIX 2 - NRA DUTIES, POWERS AND TARGETS

# National Rivers Authority South West Region



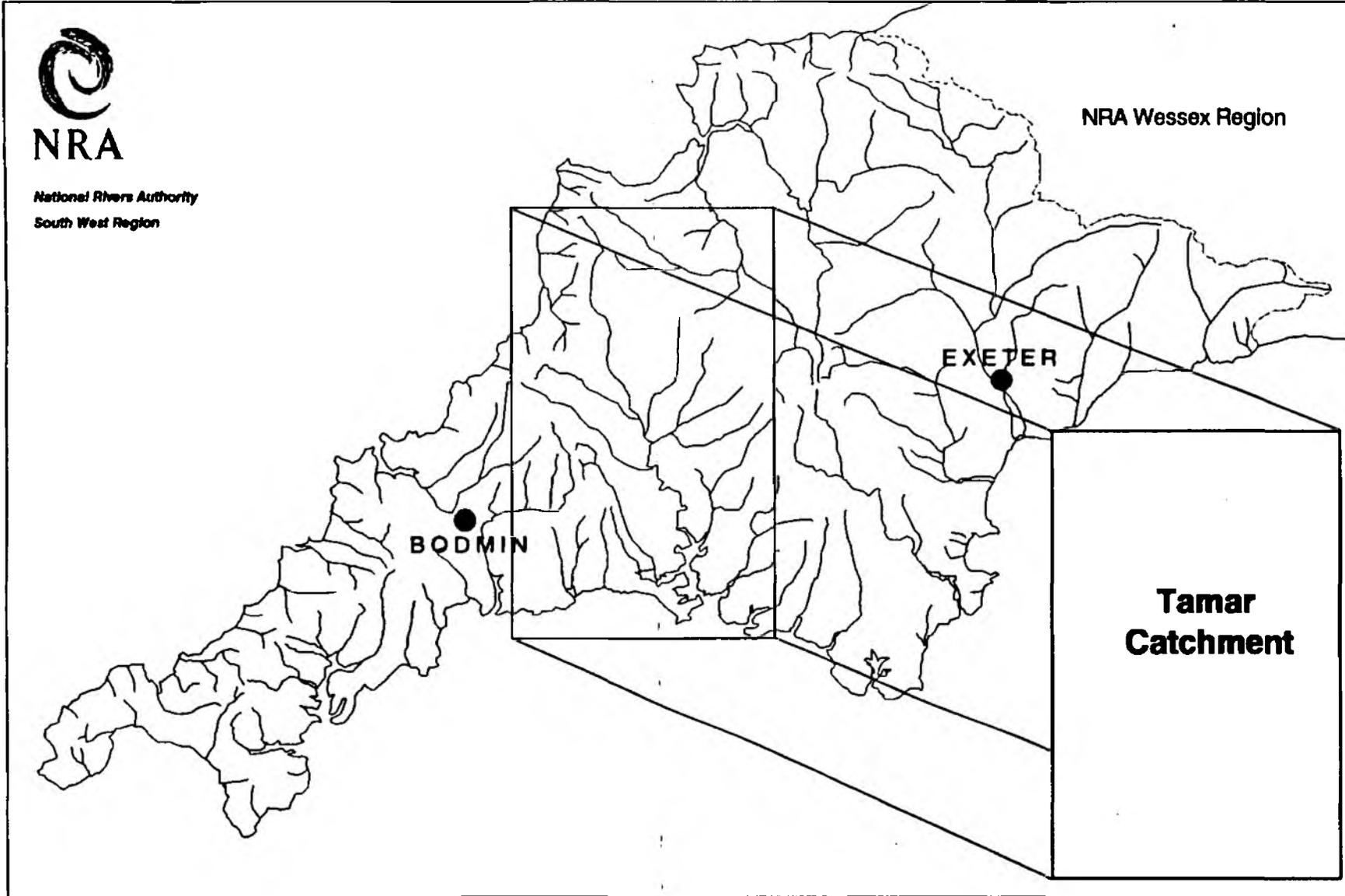
**NRA**

*National Rivers Authority*  
South West Region

125152



NRA Wessex Region



**Tamar  
Catchment**

## 1. INTRODUCTION

CATCHMENT ACTION PLANS are designed to be a simple, practical means of directing resources to achieve environmental improvements on a priority basis, between and within catchments. They set out the essential routine tasks, and a five year programme of specific actions for each catchment to meet regional and national targets. Changes may occur where unplanned work such as an extreme drought requires priority.

The NRA has inherited a legacy of environmental challenges arising from the use and abuse of our natural resources. Although significant progress has already been made it will be many years before all the work needed can be assessed, funded and carried out.

To achieve the environmental objectives will require not just the clear, vigorous direction of the NRA towards priority work but the help and support of the whole community.

The NRA has consulted with the Regional Advisory Board and Advisory Committees and the local interests about the draft action plans and the format is the outcome of those discussions.

Progress to achieve the Action Plan objectives will normally be reviewed on an annual basis but more frequently where severe problems have been identified.

## 2. ROUTINE SERVICES

Despite the fact that the NRA is largely a reactive, regulatory body it is possible to plan for much of the environmental protection work even the fact that unpredictable events will occur!

Much of the routine workload such as monitoring, enforcement of statutes and dealing with pollution and flooding incidents needs to have clear priority to ensure that it is dealt with to satisfactory standards throughout the region.

This essential work is carried out according to need in all catchments.

The NRA SW handles over 3000 pollution incidents a year. the majority of which are reported by members of the public. Many are attended within minutes and most within a few hours. In some cases major operations are undertaken to control the pollution and minimise impact on the environment.

Several thousand routine inspections of industrial premises, farms, weirs, fish passes and treatment works are also undertaken. In many cases improvements are required to minimise the risk of pollution or to ensure protection of fish and conservation of the water environment.

As part of the overall environmental protection exercise many flood defence schemes and thousands of planning applications are screened; hundreds of farm pollution grant proposals and effluent discharge applications are processed each year. Many new or varied abstraction licences and drilling consents are also processed to protect surface and underground waters.

Each year about 67,000 samples of rivers, lakes, ground and tidal waters and effluents are taken. Around 1.25 million chemical tests are made on these samples to ensure water quality standards are met and to identify where enforcement action is needed.

In addition detailed studies of samples of invertebrates, fish, algae and plants are undertaken to provide information on the status of the aquatic communities and to test the accuracy of the conclusions of chemical monitoring.

The key abstractions, discharges and monitoring sites for this catchment are marked on map(s) in Appendix 1.

Routine regulatory action is taken to ensure the conditions of thousands of discharges, abstractions and other legal requirements are enforced and illegal fishing is curtailed.

The NRA SW also handles many hundreds of letters and enquiries for information from the Water Act Register and provides press releases, reports and other information to a wide range of interests in the community.

3. **CHALLENGES AND PROPOSED ACTIONS**

The River Tamar is one of the premier salmon rivers with good runs of spring and summer salmon. It has four major tributaries the Rivers Lyd, Inny, Kensey and Ottery. The Roadford Dam is on the River Wolf, a tributary of the Lyd, and as part of the mitigation programme for loss of production, salmon and sea trout are trapped, ova obtained and 30,000 juveniles are reared at Endsleigh and are annually stocked into the system. Fifteen miles of the Upper Tamar have been adversely affected by farm pollution and abstractions resulting in poor salmonid production and deterioration of spawning gravels.

Functional officers have identified the main challenges to the achievement of environmental objectives. Where solutions are clear they have been programmed. In other cases further investigations are needed to determine the way forward.

**ACTION**

**TIMETABLE (BAR CHART)**

1991      1992      1993      1994      1995

**FISHERIES**

Enforce and monitor fixed net legislation.

Enforce and monitor netting ban for sea fish in estuary.

Review Net Limitation Order by December 1991.

Introduce byelaw banning use of natural baits for rod fishing after 31 August.

Survey all weirs and fish passes. Plan and implement fish pass installation/maintenance.

Repair Cornwall pass - Gunnislake.

Survey for trash dams/plan/clearance.

Plan and implement spawning gravel rehabilitation work in various tributaries upstream Launceston.

Construct artificial spawning beds/maintain existing - North Tamerton, Burmsdon, Two Bridges other sites in tribs upstream Launceston.

	1991	1992	1993	1994	1995
Enforce and monitor fixed net legislation.					
Enforce and monitor netting ban for sea fish in estuary.					
Review Net Limitation Order by December 1991.					
Introduce byelaw banning use of natural baits for rod fishing after 31 August.					
Survey all weirs and fish passes. Plan and implement fish pass installation/maintenance.					
Repair Cornwall pass - Gunnislake.					
Survey for trash dams/plan/clearance.					
Plan and implement spawning gravel rehabilitation work in various tributaries upstream Launceston.					
Construct artificial spawning beds/maintain existing - North Tamerton, Burmsdon, Two Bridges other sites in tribs upstream Launceston.					

**ACTION**

**TIMETABLE (BAR CHART)**

1991      1992      1993      1994      1995

Monitor major roadworks planned Wolf/Thrushel valley.

\_\_\_\_\_

Determine sources of acid run-off in Kensey and Ottery - seek control measures to protect fish stocks.

\_\_\_\_\_

Work in unison with Water Quality staff to recover fish stocks where affected by farm pollution - upstream Launceston in particular.

\_\_\_\_\_

Seek to reduce estuary adult SS and ST mortalities.

\_\_\_\_\_

Press for improvements to headwater flows from Lower Tamar Lake.

\_\_\_\_\_

Regular full juvenile fish population survey.

Programme to be determined

Specific annual juvenile monitoring Lyd catchment.

\_\_\_\_\_

Annual redd counts - particular attention upstream Launceston and to improved areas.

\_\_\_\_\_

Introduce dual checking system for assessing accuracy rod catch returns.

\_\_\_\_\_

Survey possible fish counter sites. Install counter in Cornish pass - Gunnislake.

\_\_\_\_\_

\_\_\_\_\_

Continue Roadford investigations including programme of radio tracking of fish tagged at Gunnislake and from estuary netting.

\_\_\_\_\_

Assess causes of poor recruitment upstream Launceston

\_\_\_\_\_

Continue Roadford mitigation programme using traps at Hartley, Roadford, Cookworthy and Milford.

\_\_\_\_\_

**ACTION**

**TIMETABLE (BAR CHART)**

1991    1992    1993    1994    1995

Investigate rearing-on potential at Roadford installation and operate smolt release unit.



Surplus Tamar stock for experimental stocking tributaries upstream Launceston



POLLUTION CONTROL

Carry out review of water quality in the catchment.



Followed by completion of Farm Campaign and Task Force programme of remedial action.



Assess impact of 1990 drought at 2 chemical and 2 biological sites.



Assess quality of enclosed waters at 2 locations - Upper and lower Tamar lake.



Undertake blue-green algae action plan and monitor 2 locations.



Develop water quality management plan for the catchment.



Prepare catchment description.



Assess impact of Roadford Reservoir and water resources scheme on water quality.



Develop catchment quality model using QUASAR.



Assess impact of historic mining activities on water quality.



**ACTION**

**TIMETABLE (BAR CHART)**

1991      1992      1993      1994      1995

Assess impact of acidic run-off



Monitor environmental survey of estuary.



Pre-scheme appraisal of proposed SWWS sewerage improvements in the estuary.



Determine deemed discharge consents.



Baseline water quality survey of groundwater to establish :

(a) suitability for potable use;



b) extent of contamination by substances controlled by EC directives.



**WATER RESOURCES**

Review operating agreements for Roadford Reservoir and take action as appropriate.



Promote low flow protection arrangement below Lower Tamar dam.



Assess need for and install additional river gauging stations, including inflows to Roadford Reservoir



Audit abstraction at Gunnislake intake.



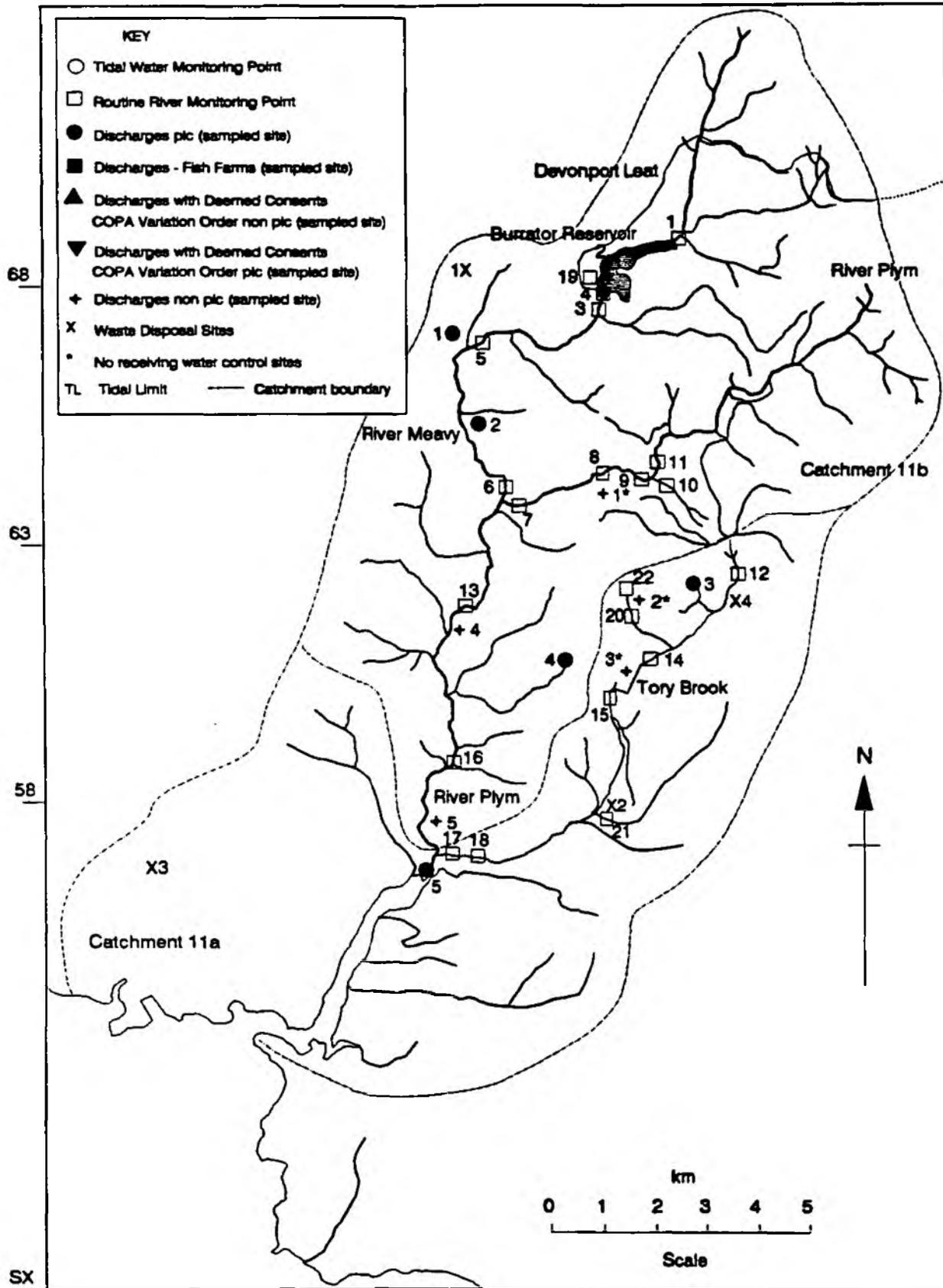
## APPENDIX 1

### CATCHMENT MAPS

#### KEY

- Tidal Water Monitoring Point
- Routine River Monitoring Point
- Discharges plc (sampled site)
- Discharges - Fish Farms (sampled site)
- ▲ Discharges with Deemed Consents - COPA Variation Order non plc (sampled site)
- ▼ Discharges with Deemed Consents - COPA Variation Order plc (sampled site)
- + Discharges non plc (sampled site)
- X Waste Disposal Sites
- TL Tidal Limit
- No receiving water control sites

# Meavy & Plym Catchments 11A & 11B



- KEY**
- Tidal Water Monitoring Point
  - Routine River Monitoring Point
  - Discharges pic (sampled site)
  - Discharges - Fish Farms (sampled site)
  - ▲ Discharges with Deemed Consents COPA Variation Order non pic (sampled site)
  - ▼ Discharges with Deemed Consents COPA Variation Order pic (sampled site)
  - + Discharges non pic (sampled site)
  - X Waste Disposal Sites
  - No receiving water control sites
  - TL Tidal Limit — Catchment boundary

68

63

58

SX

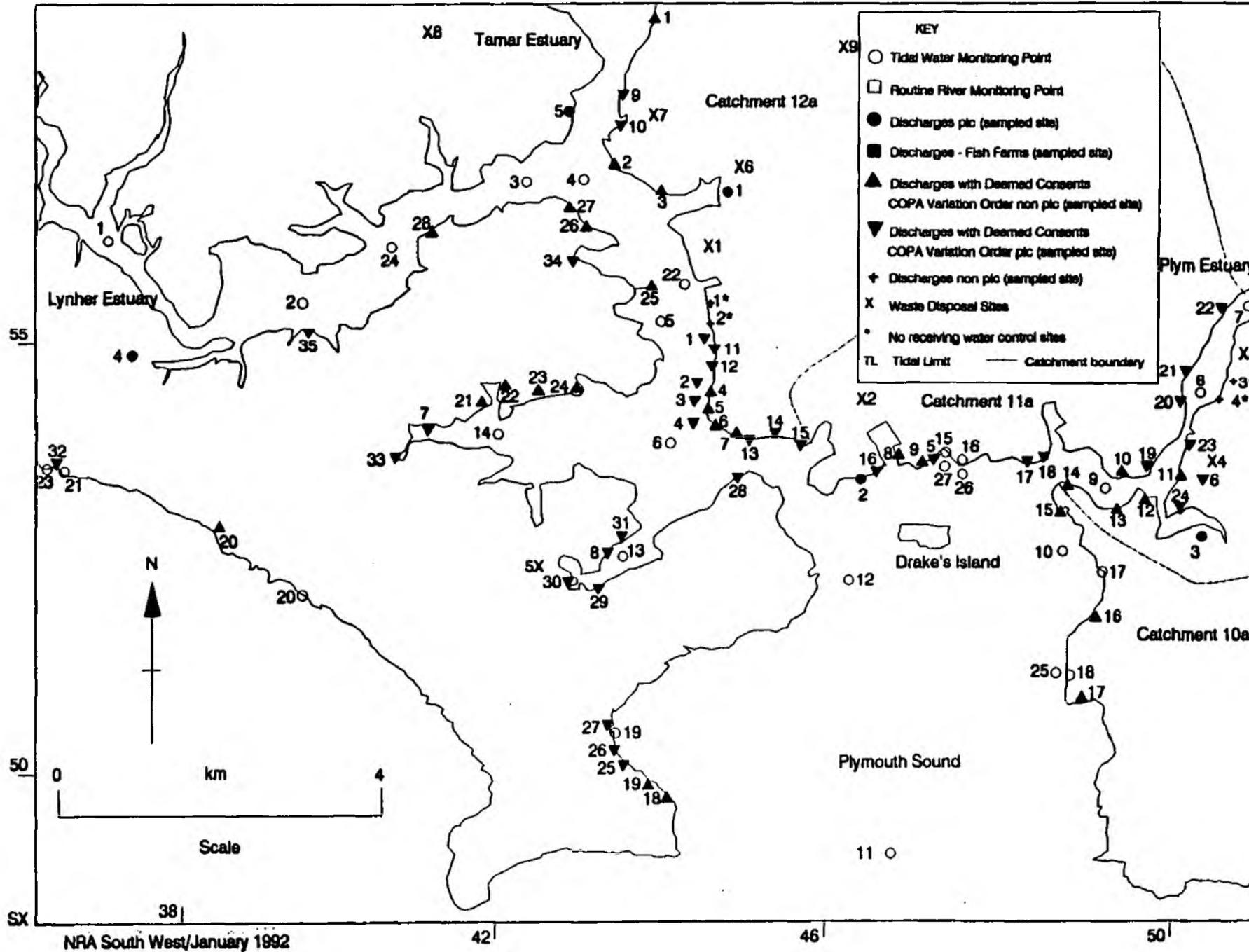
HEAVY & PLYM CATCHMENTS 11A & 11B

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
<b>DISCHARGES NON PLC</b>				
1*	P11B/P/9	SX55806450	Shaugh Lake	China clay works
2*	P11A/P/14	SX56206120	Lee Moor Plant	CP 38/6 China clay works
3*	P11A/P/4	SX55846020	Portworthy Dam	China clay works
4	P11B/P/1	SX52206160	Bickleigh	Sewage treatment works
5	P11B/P/6	SX52005750	Marsh Mills	CP 39/1 China clay works
<b>DISCHARGES PLC</b>				
1	WSTW4594FE	SX52446678	Gratton	Sewage treatment works
2	WSTW4544FE	SX52606560	Clearbrook	Sewage treatment works
3	WSTW4650FE	SX57286151	Lee Moor	Sewage treatment works
4	WSTW4830FE	SX55526148	Wotter	Sewage treatment works
5	WSTW4728FE	SX52005630	Marsh Mills	Sewage treatment works Red list site
6	WSTW4763FE	SX43005820	Saltash (Coombe)	Paris commission site Sewage treatment works Site for current and proposed dangerous substances
<b>WASTE DISPOSAL SITES</b>				
1	11EAGJAL	SX527681	Higher Lake Farm, Dousland	
2	11EAGXAL	SX555585	Newham Park, Plympton	
3	11EAHWAL	S470560	Marsh Mills China Clay Works	
4	11FAJAAL	SX560610	Torycombe Lee Moor, Plymouth	
<b>ROUTINE RIVER MONITORING</b>				
1	R11B008	SX56696925	Weir/Burrator Res	Chemical/biological site
2	R11B028	SX55516856	Burrator Res	Chemical site Freshwater Fish Directive
3	R11B009	SX55146791	Below Burrator Res	Chemical/biological site
4	R11B029	SX551680	Burrator Reservoir	EC Surface water abstraction directive monitoring site
	R11B030			
	R11B031	SX551680	Burrator Reservoir	Algological site
5	R11B010	SX52956704	Gratton Ford Bridge	Chemical/biological site
6	R11B011	SX53306375	Confluence/R Plym	Chemical/biological site Freshwater Fish Directive
7	R11B004	SX53356368	Shaugh Bridge	Chemical/biological site
8	R11B003	SX55566465	Cadover Bridge	Chemical/biological site Freshwater Fish Directive
9	R11B002	SX56396450	Below Blackabrook	Chemical/biological site
10	R11B007	SX56466441	Blackabrook	Chemical/biological site
11	R11B001	SX56486446	Above Blackabrook	Chemical/biological site Dangerous Substances Directive
12	R11A001	SX57866173	Tolchmoor Bridge	Chemical/biological site
13	R11B018	SX52706181	Bickleigh	Chemical/biological site
14	R11A002	SX56556075	Coleland Bridge	Chemical/biological site
15	R11A003	SX55656008	Portworthy Bridge	Chemical/biological site
16	R11B006	SX52375867	Plym Bridge	Chemical/biological site Red list site Freshwater Fish Directive Dangerous substances site Harmonised monitoring point
17	R11A005	SX52755660	Marsh Mills Bridge	Chemical/biological site
18	R11A004	SX53925655	Station Rd Plympton	Chemical/biological site
19	R11B032	SX55006837	Devonport Leat	EC Surface water abstraction directive monitoring site

HEAVY & PLYM CATCHMENTS 11A & 11B

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
ROUTINE RIVER MONITORING				
20	R11A025	SX56306108	D/s of CP 38/6	Chemical site Dangerous substances site
21	R11A020	SX55055740	Prior/Tory Brook	Chemical/biological site Chemical site
22	R11A024	SX56256140	U/s CP 38/6	Dangerous substances control site

# Lower Tamar Estuary 11A & 12A



LOWER TAMAR ESTUARY 11A & 12A

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
<b>DISCHARGES NON PLC</b>				
1*	OUT4939	SX44405630	Devonport Dockyard	Site for current dangerous substances
2*	OUT4937	SX44505620	Devonport Dockyard	Site for current dangerous substances
3*	P11A/P/45	SX50405450	Chelson Meadow	Landfill site
4*	P11A/P/12	SX50505440	Plymstock	Cement works STW
<b>DISCHARGES PLC</b>				
1	WSTW4722FE	SX44505712	Camels Head	Sewage treatment works Site for current and proposed dangerous substances Red list site Paris commission site
2	OUT4940	SX46715346	Eastern Kings	Outfall Site for current dangerous substances
3	WSTW4726FE	SX50195283	Radford	Sewage treatment works Red list site
4	WSTW4765FE	SX37405490	Sheviock	Sewage treatment works
5	WSTW4763FE	SX43005820	Saltash(Coombe)	Sewage treatment works Site for current and proposed dangerous substances
<b>DISCHARGES WITH DEEMED CONSENTS - COPA VARIATION ORDER NON PLC</b>				
1	P12A/P/146	SX44015926	Ernesettle Plymouth RNAD	
2	P12A/P/145	SX43415761	RNAD Bullpoint	
3	P12A/P/155	SX43895731	RNAD Bullpoint	
4	P12A/P/111	SX44875508	Morice Yard Devonport	
	P12A/P/112	SX44785501	Morice Yard Devonport	
	P12A/P/128	SX44745503	Morice Yard Devonport	
	P12A/P/102	SX44535692	North Devon Dockyard	
	P12A/P/103	SX44425645	North Devon Dockyard	
	P12A/P/104	SX44455631	North Devon Dockyard	
	P12A/P/105	SX44495617	North Devon Dockyard	
	P12A/P/106	SX44595601	North Devon Dockyard	
	P12A/P/107	SX44825604	North Devon Dockyard	
	P12A/P/108	SX44685577	North Devon Dockyard	
	P12A/P/109	SX44695576	North Devon Dockyard	
	P12A/P/110	SX44725557	North Devon Dockyard	
	P12A/P/138	SX44485665	North Devon Dockyard	
	P12A/P/133	SX44585664	North Devon Dockyard	
	P12A/P/134	SX44685629	North Devon Dockyard	
	P12A/P/135	SX44695626	North Devon Dockyard	
	P12A/P/136	SX44735615	North Devon Dockyard	
	P12A/P/137	SX44545605	North Devon Dockyard	
	P12A/P/139	SX44455664	North Devon Dockyard	
	P12A/P/140	SX44355663	North Devon Dockyard	
	P12A/P/143	SX44395688	North Devon Dockyard	
	P12A/P/141	SX44295669	North Devon Dockyard	
	P12A/P/142	SX44255681	North Devon Dockyard	
	P12A/P/144	SX44515666	North Devon Dockyard	

LOWER TAMAR ESTUARY 11A & 12A (cont)

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
<b>DISCHARGES WITH DEEMED CONSENTS - COPA VARIATION ORDER NON PLC</b>				
5	P12A/P/113	SX44785492	Morice Yard	Devonport
	P12A/P/129	SX44735480	Morice Yard	Devonport
6	P12A/P/114	SX44735467	South Yard	Devonport
	P12A/P/115	SX44725465	South Yard	Devonport
	P12A/P/116	SX44705459	South Yard	Devonport
	P12A/P/117	SX44705452	South Yard	Devonport
	P12A/P/118	SX44695443	South Yard	Devonport
	P12A/P/119	SX44685433	South Yard	Devonport
	P12A/P/120	SX44785421	South Yard	Devonport
	P12A/P/121	SX44815433	South Yard	Devonport
	P12A/P/131	SX44825407	South Yard	Devonport
	P12A/P/122	SX44805414	South Yard	Devonport
	P12A/P/123	SX44875404	South Yard	Devonport
7	P12A/P/124	SX44995398	South Yard	Devonport
	P12A/P/125	SX45015395	South Yard	Devonport
	P12A/P/126	SX45115393	South Yard	Devonport
	P12A/P/127	SX45155393	South Yard	Devonport
	P12A/P/130	SX45025392	South Yard	Devonport
8	P11A/P/92	SX47015360	Millbay Pier	
9	P11A/P/48	SX47755360	Hoe Swimming Pool	
10	P11A/P/18	SX49085357	Cattewater Harbour	
11	P11A/P/100	SX50105385	DWO Depot	
12	P11A/P/98	SX49445323	Turnchapel	
13	P11A/P/90	SX49055317	Mountbatten	
14	P11A/P/89	SX48955323	Mountbatten	
	P11A/P/85	SX48825305	Mountbatten	
	P11A/P/86	SX48705310	Mountbatten	
15	P11A/P/88	SX48615337	Mountbatten	
	P11A/P/87	SX48585337	Mountbatten	
16	P10A/P/29	SX49155196	Fort Stadden	
17	P10A/P/28	SX48675070	Fort Bovisand	
18	P12A/P/153	SX44134949	Pier Cellars	
19	P12A/P/151	SX44074957	Pier Cellars	
	P12A/P/152	SX44104955	Pier Cellars	
20	P12A/P/154	SX38255280	Tregantle Fort	
21	P12A/P/33	SX42005456	HMS Raleigh Fire Pan	
22	P12A/P/147	SX42205462	HMS Raleigh	
23	P12A/P/148	SX4275448	HMS Raleigh	
24	P12A/P/149	SX42905450	HMS Raleigh	
25	P12A/P/150	SX44105592	Yonderbury Point	
26	P12A/P/101	SX43255675	Point Bullock Diamond Works	
27	P12A/P/76	SX43295670	Point Bullock Diamond Works	
28	P12A/P/156	SX41305660	Antony House Torpoint	

LOWER TAMAR ESTUARY 11A & 12A (cont)

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
<b>DISCHARGES WITH DEEMED CONSENTS - COPA VARIATION ORDER PLC</b>				
1	OUT4972	SX44565590	St Levan Road	Outfall Site for current and proposed dangerous substances
2	OUT4922	SX44735535	Albert Road	Outfall Site for current dangerous substances
3	OUT4952	SX44775498	Marlborough Street	Outfall Site for current dangerous substances
4	OUT4942	SX44655420	Edinburgh Street	Outfall Site for current dangerous substances
5	OUT4978	SX47195335	West Hoe	Outfall Site for current and proposed dangerous substances
6	WSTW4720FE	SX50105402	Billacombe	Red list site Sewage treatment works Site for current dangerous substances
7	WSTW4786FE	SX41465405	Torpoint (Trevol)	Sewage treatment works Site for current and proposed dangerous substances
8	OUT4920	SX30269909	Millbrook	Outfall Site for current dangerous substances
9	OUT4964	SX43685865	Normandy Hill	Outfall
10	OUT4968	SX43655844	St Budeaux Wharf	Outfall
	OUT4951	SX43615841	Little Ash Gardens	Outfall
11	OUT4962	SX44785525	Pottery Road	Outfall
12	OUT4936	SX44795469	Cornwall Street	Outfall
13	OUT4956	SX45295394	Mutton Cove	Outfall
14	OUT4954	SX45685398	Mountwise Plymouth	Outfall
15	OUT4958	SX45845386	Ocean Court	Outfall
16	OUT4980	SX46795365	West Millbay	Outfall
17	OUT4934	SX48085365	Citadel	Outfall
18	OUT4926	SX48345360	Fishers Nose	Outfall
19	OUT4953	SX49675359	Prince Rock	Outfall
20	OUT4950	SX50035438	St Judes	Outfall
21	OUT4974	SX50005466	Stenlake Terrace	Outfall
22	OUT4924	SX50425534	Arnolds Point	Outfall
23	OUT4930	SX50065396	Cattedown Wharf	Outfall Site for current dangerous substances
24	OUT4960/1-5	SX499532	Oreston	Five outfalls
25	OUT4911	SX43505015	Cawsand/South	Outfall
	OUT4910	SX43505029	Cawsand/Criterion	Outfall
26	OUT4919	SX43525048	Kingsand/South	Outfall
27	OUT4918	SX43635058	Kingsand/North	Outfall
28	OUT4912	SX45395350	Cremyll	Outfall
29	OUT4921	SX43305220	Millbrook/Anderton	Outfall
30	OUT4917	SX43095222	Millbrook Village	Outfall
31	OUT4986	SX43515261	Southdown B	Outfall
	OUT4987	SX43625261	Southdown C	Outfall

LOWER TAMAR ESTUARY 11A & 12A (cont)

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
<b>DISCHARGES WITH DEEMED CONSENTS - COPA VARIATION ORDER PLC</b>				
32	OUT5064	SX35625366	Portwrinke	Outfall
33	WSTW4756FE	SX40945374	St John	Sewage treatment works
34	OUT4982	SX43205645	Willcove	Outfall
35	WSTW4502FE	SX39605520	Antony	Sewage treatment works

**WASTE DISPOSAL SITES**

1	11EAAMAL	SX448568	North Down Crescent, Plymouth
2	11EAFTAL	SX465547	Stonehouse Playing Field, Stonehouse
3	11EABZAL	SX510548	Chelston Meadow, Plymouth
4	11EAANAL	SX511543	Plymstock Works, Plymouth
5	O8OANLAL	SX425525	Millpool, Millbrook
6	11EAFLAL	SX457578	Weston Mill, Plymouth
7	11EAFMAL	SX447586	Weston Mill Road, St Budeaux
8	O8OARYAL	SX410600	Poles Farm, Carkeel, Saltash
9	11EAJDAL	SX460580	Honicknowle Refuse Tip, Honicknowle

**TIDAL WATER QUALITY MONITORING POINT - ESTUARY QUALITY**

1	E12A13	SX37455625	By Sheviok Wood	Routine monitoring site
2	E12A11	SX42205735	By Antony Passage	Routine monitoring site
3	E12A12	SX40005600	Mid Estuary	Routine monitoring site
4	E12A7	SX43255730	Off Wilcove	Routine monitoring site
5	E12A6	SX44255580	Dockyard	Water contact sports monitoring point Routine monitoring site
6	E12A5	SX44505400	Lower Estuary	Water contact sports monitoring point Routine monitoring site
7	E11A3	SX51355580	By Saltram House	Routine monitoring site
8	E11A2	SX50155436	Laira Bridge	Routine monitoring site
9	E11A1	SX49005340	Cattewater	Routine monitoring site
10	E12A8	SX48305215	Jennycliff Bay	Routine monitoring site
11	E12A3	SX46824950	Plymouth Sound	Routine monitoring site
12	E12A4	SX46505215	Br/Plymouth Sound	Routine monitoring site
13	E12A9	SX43605240	Millbrook Lake	Routine monitoring site
14	E12A10	SX42555425	St Johns Lake	Routine monitoring site

**TIDAL WATER QUALITY MONITORING POINT - BATHING WATERS**

15	ECB0421	SX475537	Plymouth Hoe/West	EC identified bathing water
16	ECB0420	SX478537	Plymouth Hoe/East	EC identified bathing water
17	B0415	SX49155225	Jennycliff Bay	Non-identified bathing water
18	ECB0410	SX493505	Bovisand Beach	EC identified bathing water
19	B0425	SX43425020	Cawsand Bay	Non-identified bathing water
20	B0426	SX39605205	Whitsand Bay	Non-identified bathing water
21	ECB0430	SX359538	Portwrinkle Beach	EC identified bathing water

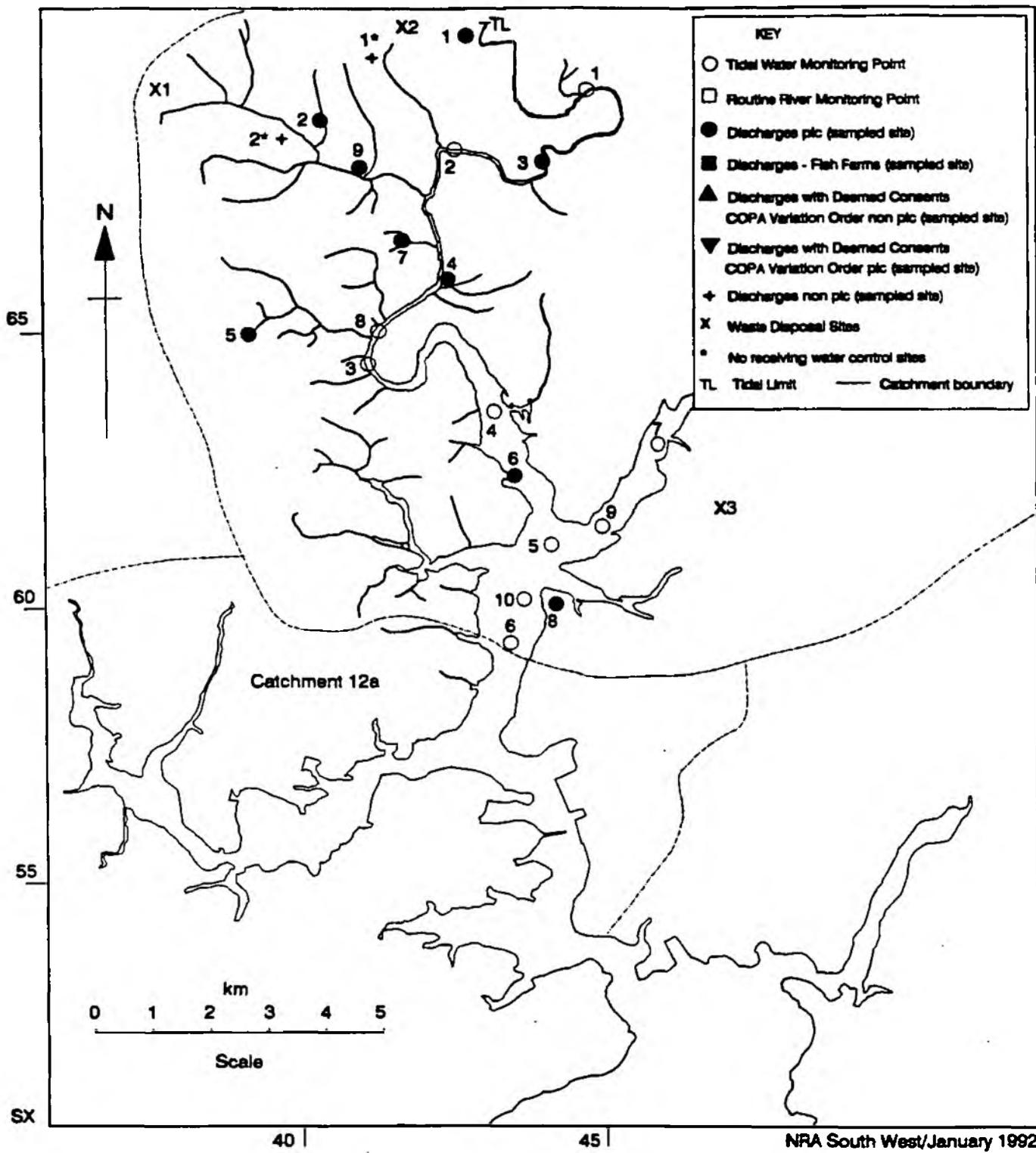
**TIDAL WATER QUALITY MONITORING POINT - BIOTA SAMPLING**

22	SF023	SX44105600	Hamoaze	Bioaccumulation Programme
23	SF002	SX35305390	Port Wrinkle Beach	Bioaccumulation Programme
24	SF005	SX40805690	Shillingham	Bioaccumulation Programme

**TIDAL WATER QUALITY MONITORING POINT - WATER CONTACT SPORTS**

25			Bovisand Beach
26			Plymouth Sound - The Hoe (East)
27			Plymouth Sound - The Hoe (West)

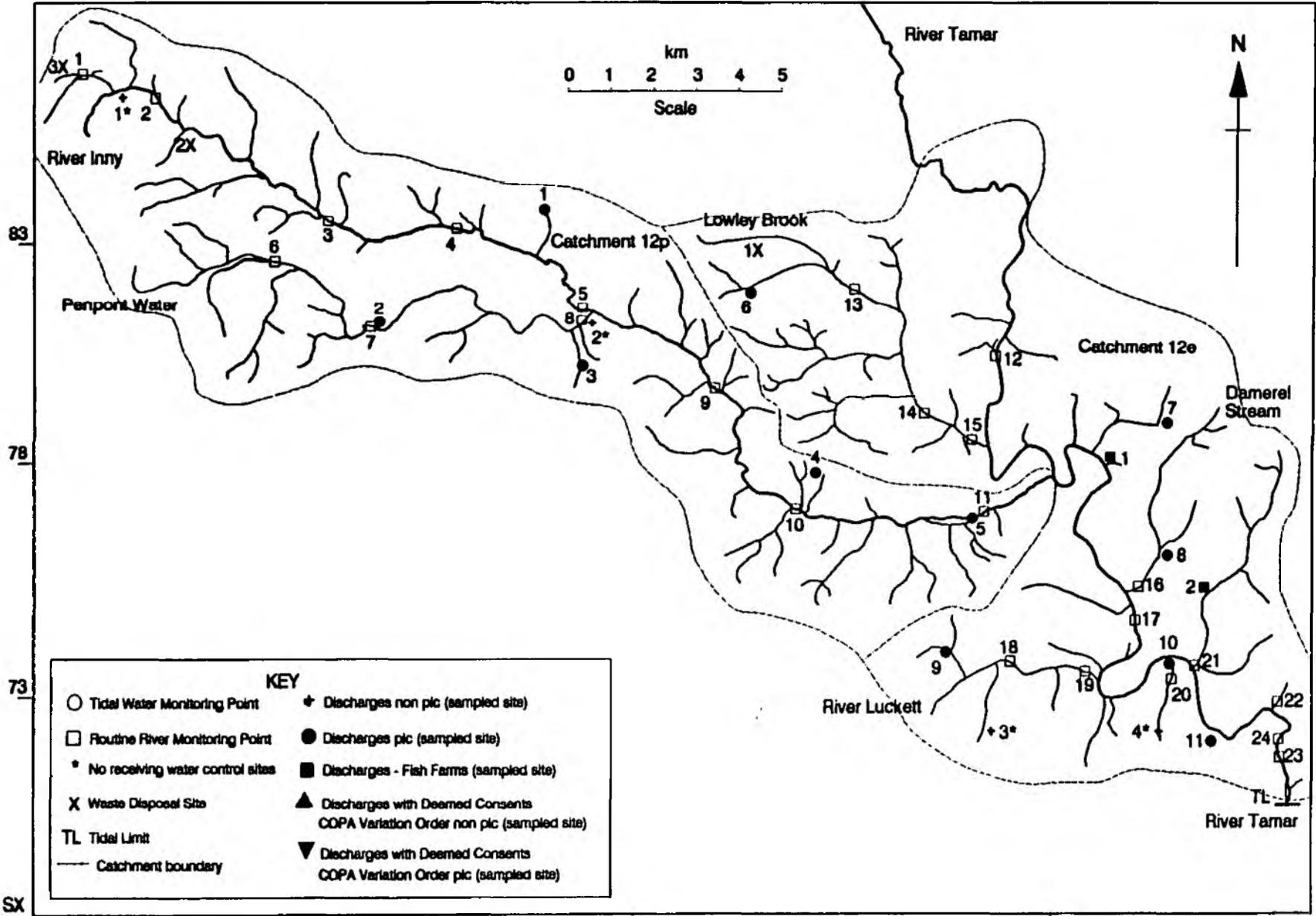
# Tamar Tidal Catchment 12B



TAMAR TIDAL CATCHMENT 12B

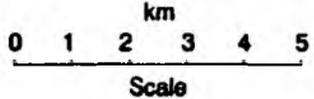
NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
<b>DISCHARGES NON PLC</b>				
1*	P12B/P/20	SX41307040	Honicombe	Caravan Site STW
2*	P12B/P/11	SX39936913	St Dominick	Caravan Site STW
<b>DISCHARGES PLC</b>				
1	WSTW4596FE	SX43507089	Gunnislake	Sewage treatment works
2	WSTW4606FE	SX40266974	Harrowbarrow	Sewage treatment works
3	WSTW4538FE	SX44486860	Calstock	Sewage treatment works
4	WSTW4516FE	SX44046635	Bere Alston	Sewage treatment works
5	WSTW4760FE	SX39096536	St Mellion	Sewage treatment works
6	WSTW4537FE	SX43206290	Cargreen	Sewage treatment works
7	WSTW4752FE	SX41906710	St Dominick	Sewage treatment works
8	WSTW4724FE	SX44246023	Ernesettle	Sewage treatment works
				Site for current and proposed dangerous substances Red list
				Paris commission site
9	WSTW4680FE	SX41066928	Metherell	Sewage treatment works
<b>WASTE DISPOSAL SITES</b>				
1	080APWAL	SX379695	Fullaford Farm, Callington	
2	080AAGAL	SX425720	North Dimison, Gunnislake	
3	11EAHLAL	SX480620	Gr Trehills Farm, Tamerton Foliot	
<b>TIDAL WATER QUALITY MONITORING POINT - ESTUARY QUALITY</b>				
1	E12B5	SX44706970	Morwellham	Routine monitoring site
2	E12B4	SX42956880	By Calstock	Routine monitoring site
3	E12B8	SX41206460	Pentillie Castle	Routine monitoring site
4	E12B3	SX43406395	Mid Estuary	Routine monitoring site
5	E12B6	SX44056130	Warleigh Point	Routine monitoring site
6	E12B2	SX43505905	Tamar Bridge	Routine monitoring site
				Water contact sports monitoring point
7	E12B7	SX46156330	Nr Bere Ferrers	Routine monitoring site
<b>TIDAL WATER QUALITY MONITORING POINT - BIOTA PROGRAMME</b>				
8	SF021	SX413655	Halton Quay	Baseline Programme
9	SF020	SX450615	Tavy Bridge	
10	SF018	SX441606	Warren Point	Baseline Programme

# Inny Catchment 12E & 12P



**KEY**

○ Tidal Water Monitoring Point	◆ Discharges non pic (sampled site)
□ Routine River Monitoring Point	● Discharges pic (sampled site)
* No receiving water control sites	■ Discharges - Fish Farms (sampled site)
X Waste Disposal Site	▲ Discharges with Deemed Consents COPA Variation Order non pic (sampled site)
TL Tidal Limit	▼ Discharges with Deemed Consents COPA Variation Order pic (sampled site)
--- Catchment boundary	



83  
78  
73  
SX

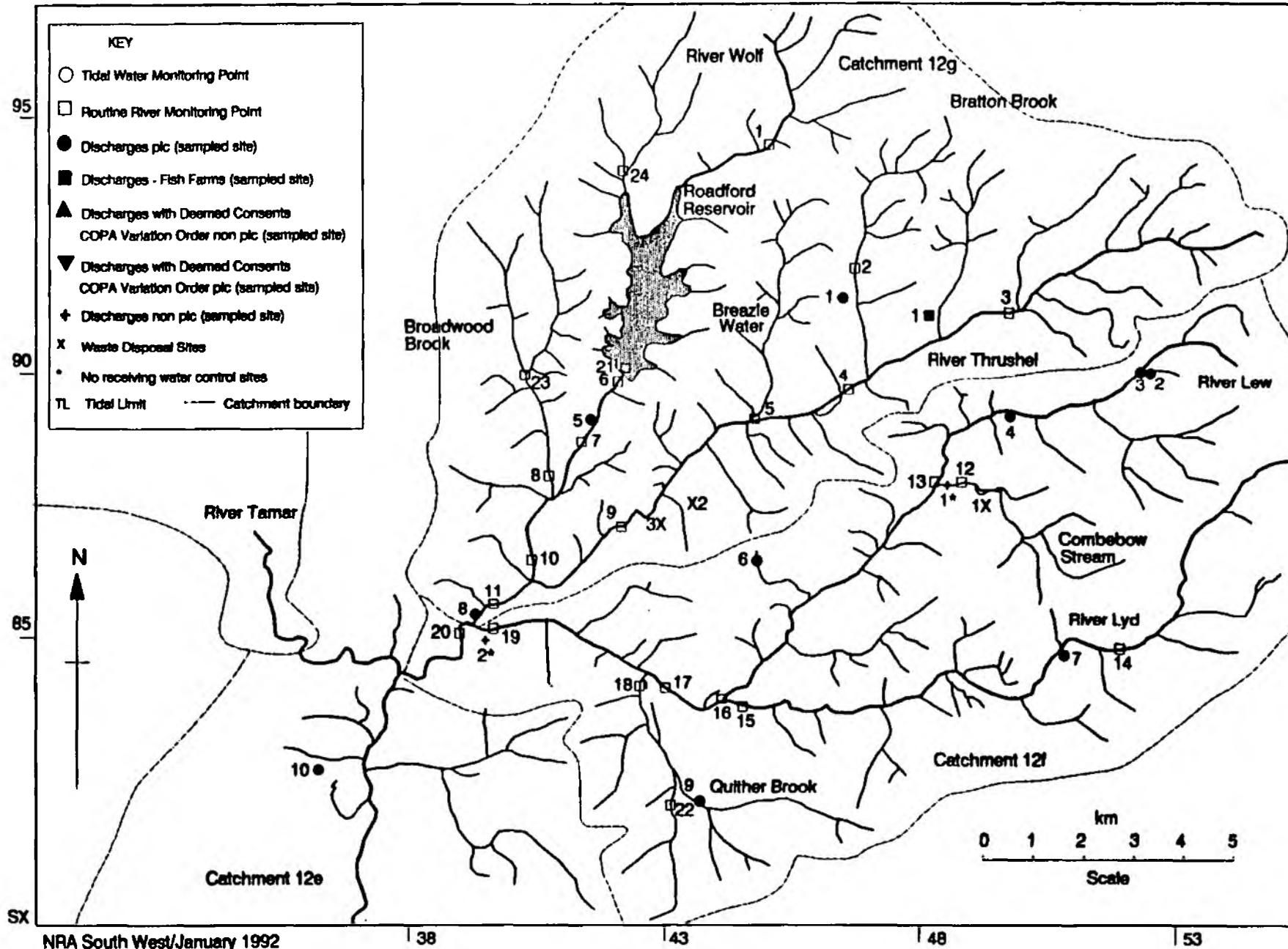
**INNY CATCHMENT 12E & 12P**

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
<b>DISCHARGES NON PLC</b>				
1*	P12P/P/5	SX15808690	Davidstow	Creamery
	P12P/P/20	SX15808690	Inny Vale	Holiday village
2*	P12P/P/24	SX27108170	Launceston	Public toilets
3*	P12E/P/11	SX36507310	Stokeclimsland	Sewage treatment works
4*	P12E/P/12	SX41737263	Hingston Quarry	Stone Quarry
<b>DISCHARGES PLC</b>				
1	WSTW4718FE	SX26068401	Pipers Pool	Sewage treatment works
2	WSTW4500FE	SX22408140	Altarnun	Sewage treatment works
3	WSTW4652FE	SX26668076	Lewannick	Sewage treatment works
4	WSTW4788FE	SX32267818	Trebullett	Sewage treatment works
5	WSTW4514FE	SX35947707	Beals Mill	Sewage treatment works
6	WSTW4767FE	SX31508255	South Petherwin	Sewage treatment works
7	WSTW4686FE	SX41267921	Milton Abbot	Sewage treatment works
8	WSTW4775FE	SX40607588	Sydenham Damerel	Sewage treatment works
9	WSTW4771FE	SX35807400	Stoke Climsland	Sewage treatment works
10	WSTW4642FE	SX40837397	Latchley	Sewage treatment works
11	WSTW4542FE	SX41837256	Chilsworthy	Sewage treatment works
<b>FISH FARMS</b>				
1	P12E/P/32	SX39327831	Endsleigh Hatchery	
2	P12E/P/33	SX41697537	Higher Woodley	
<b>WASTE DISPOSAL SITES</b>				
1	080ANCAL	SX317834	Bangor Transfer Station, Launceston	
2	080ARWAL	SX182853	Blue Haven, St Clether	
3	080ASAAL	SX141877	Higher Trehane Farm, Davidstow	
<b>ROUTINE RIVER MONITORING</b>				
1	R12P001	SX15338702	Davidstow Creamery	Chemical/biological site
2	R12P002	SX17018650	Trewinnow Bridge	Chemical/biological site
3	R12P003	SX20618418	St Clether Bridge	Chemical/biological site
4	R12P012	SX24198339	Gimblett's Mill	Chemical/biological site
5	R12P004	SX27068175	Two Bridges	Chemical/biological site Freshwater Fish Directive
6	R12P010	SX20028286	Trelin Bridge	Chemical/biological site
7	R12P007	SX22338130	Altarnun Bridge	Chemical/biological site
8	R12P008	SX26958165	Two Bridges	Chemical/biological site Freshwater Fish Directive
9	R12P005	SX30027987	Trekelland Bridge	Chemical/biological site
10	R12P013	SX32027713	Trecarrell Bridge	Chemical/biological site
11	R12P006	SX35887706	Beals Mill Bridge	Chemical/biological site Freshwater Fish Directive
12	R12E001	SX36838038	Greystone Bridge	Chemical/biological site
13	R12E005	SX32878235	Lana Bridge	Chemical/biological site
14	R12E017	SX34737970	Landue Bridge	Chemical/biological site
15	R12E006	SX35937873	Lowley Bridge	Chemical/biological site Freshwater Fish Directive
16	R12E014	SX39897549	Damerel Stream	Chemical/biological site
17	R12E002	SX40017486	Horsebridge	Chemical/biological site
18	R12E016	SX37007385	Old Mill	Chemical/biological site
19	R12E007	SX38887368	Luckett Bridge	Chemical/biological site Dangerous Substances Directive
20	R12E028	SX40887374	Latchley Brook	Chemical/biological site Dangerous Substances Directive

INNY CATCHMENT 12E & 12P (cont)

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
ROUTINE RIVER MONITORING				
21	R12E034	SX41437373	Portontown Stream	Chemical/biological site Dangerous Substances Directive
22	R12E004	SX43257291	Blanchdown Stream	Chemical/biological site Dangerous Substances Directive
23	R12E003	SX43327224	Gunnislake Bridge	Chemical/biological site Red list site Freshwater Fish Directive Dangerous substances site
24	R12E035	SX43377235	Gunnislake	Harmonised monitoring point EC Surface water abstraction directive monitoring site

# Lyd, Thrushel & Wolf Catchments 12F & 12G



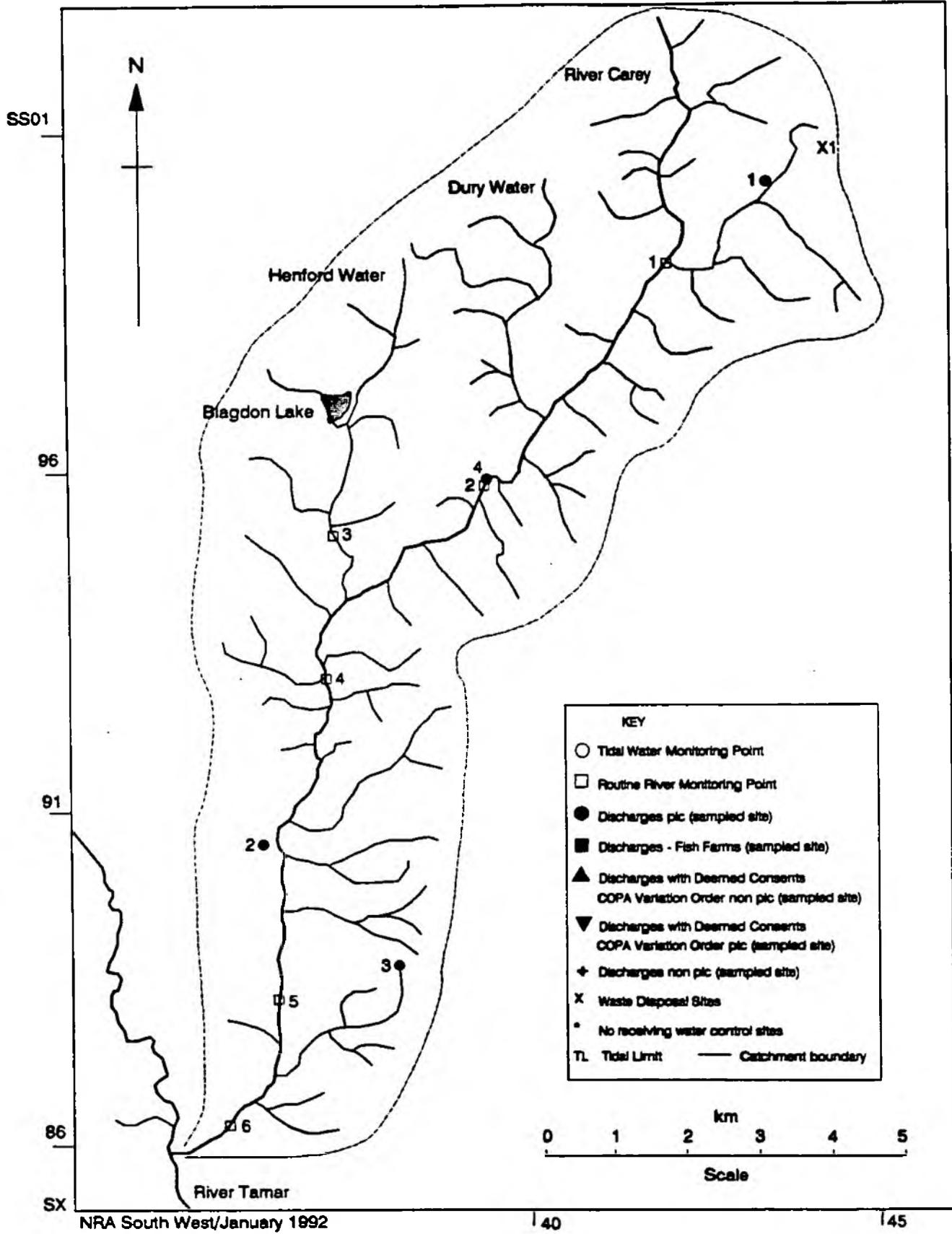
LYD, THRUSHEL & WOLF CATCHMENTS 12F & 12G

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
<b>DISCHARGES NON PLC</b>				
1*	R12F008	SX48758793	Combebow Quarry	River sampling site
2*	P12F/P/7	SX39708495	Ambrosia Creamery	Sewage treatment works
	P12F/P/10	SX39708495	Ambrosia Creamery	Trade effluent
<b>DISCHARGES PLC</b>				
1	WSTW3035FE	SX46489175	Bratton Clovelly	Sewage treatment works
2	WSTW3277FE	SX53219025	Sourton	Sewage treatment works
3	WSTW3278FE	SX54329130	Sourton Down	Sewage treatment works
4	WSTW3042FE	SX50008926	Bridestowe	Sewage treatment works
5	WSTW3048FE	SX41368884	Broadwoodwidge	Sewage treatment works
6	WSTW4654FE	SX44808680	Lewdown	Sewage treatment works
7	WSTW4664FE	SX50868479	Lydford	Sewage treatment works
8	WSTW4656FE	SX39278508	Lifton	Sewage treatment works
9	WSTW4540FE	SX43138235	Chillaton	Sewage treatment works
10	WSTW4646FE	SX35948243	Lawhitton	Sewage treatment works
<b>FISH FARMS</b>				
1	P12G/P/1	SX49449122	Bratton Clovelly	
<b>WASTE DISPOSAL SITES</b>				
1	11JACAAL	SX491878	Combebow, Bridestowe	
2	11JACHAL	SX435876	Wreys Quarry, Stowford	
3	11JAGDAL	SX432872	Stowford Quarry, Lewdown	
<b>ROUTINE RIVER MONITORING</b>				
1	R12G005	SX44619423	Weeks Mill Bridge	Chemical/biological site
2	R12G009	SX46769202	Bratton Clovelly	Chemical/biological site
3	R12G001	SX49889128	Rivermead Bridge	Chemical/biological site
4	R12G002	SX46558985	Wrixhill Bridge	Chemical/biological site
5	R12G010	SX44768917	Breazle Water	Chemical/biological site
6	R12G084	SX419898	Roadford New Bridge	Chemical/biological site
7	R12G006	SX41338885	Rexon Bridge	Chemical/biological site
8	R12G012	SX40668799	Kellacott Bridge	Chemical/biological site
9	R12G003	SX42808735	Stowford Bridge	Chemical/biological site
10	R12G007	SX40318629	River Wolf	Chemical/biological site
11	R12G004	SX39388538	Tinhay Bridge	Freshwater Fish Directive Chemical/biological site
12	R12F010	SX48818796	Combebow Stream	Chemical/biological site
13	R12F003	SX48538793	Combebow Bridge	Chemical/biological site
14	R12F012	SX52058446	Lydford	Chemical/biological site
15	R12F001	SX44368325	Greenlanes Bridge	Chemical/biological site
16	R12F004	SX44108340	River Lew	Chemical/biological site Freshwater Fish Directive
17	R12F011	SX42888388	Sydenham Bridge	Chemical/biological site
18	R12F013	SX42658398	Quither Brook	Chemical/biological site
19	R12F016	SX393849	River Lyd	Chemical/biological site
20	R12F002	SX38928480	Lifton Bridge	Chemical/biological site Freshwater Fish Directive

LYD, THRUSHEL & WOLF CATCHMENTS 12F & 12G (cont)

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
ROUTINE RIVER MONITORING				
21	R12G092 R12G093 R12G094	SX42509010	Roadford Reservoir	EC Surface water abstraction directive monitoring site
22		SX43208190	Chillaton Stream	Biological site
23		SX40208990	Buddle Brook	Biological site
24	R12G096	SX42509390	Hennard Stream	Chemical/biological site

# Carey Catchment 12H



CAREY CATCHMENT 12H

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
DISCHARGES PLC				
1	WSTW3124FE	SX42959913	Halwill	Sewage treatment works
2	WSTW3259FE	SX36559017	St Giles/Heath	Sewage treatment works
3	WSTW3090FE	SX38218844	East Kitcham	Sewage treatment works
4	WSTW3010FE	SX39299530	Ashwater	Sewage treatment works

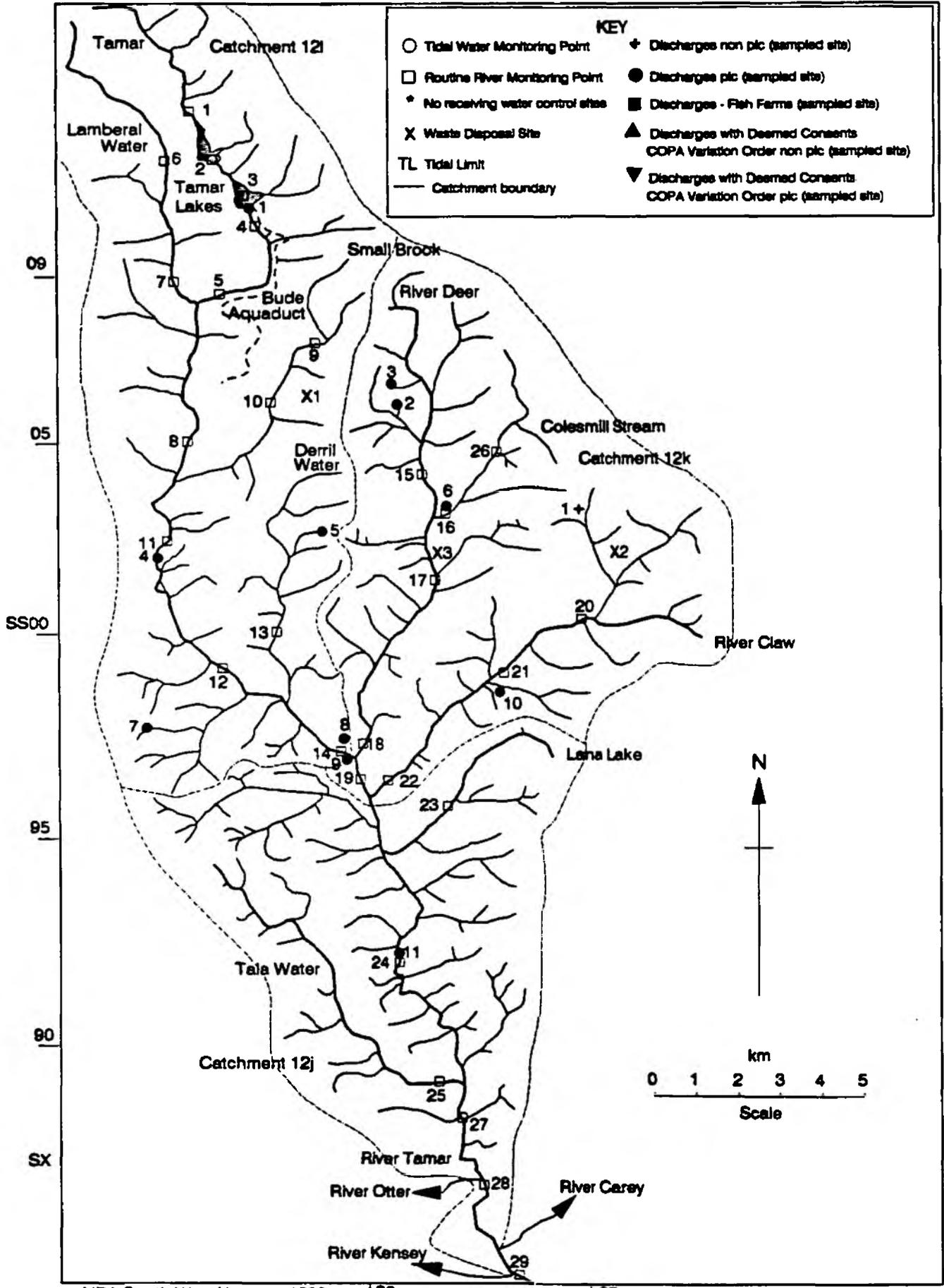
WASTE DISPOSAL SITES

1	11IAHEAL	SS443005	Old Quarry Gr Hallwill Burrow, Halwill Junction
---	----------	----------	--

ROUTINE RIVER MONITORING

1	R12H006	SX42019850	Halwill Bridge	Chemical/biological site
2	R12H001	SX39359534	Ashmill Bridge	Chemical/biological site
3	R12H005	SX37359472	Henford Water	Chemical/biological site
4	R12H007	SX37109263	Middle Bridge	Chemical/biological site
5	R12H008	SX36428828	Boldford Bridge	Chemical/biological site
6	R12H002	SX36008631	Heale Bridge	Chemical/biological site Freshwater Fish Directive

# Claw, Deer & Upper Tamar Catchments 12J, 12K & 12L



CLAW, DEER & UPPER TAMAR CATCHMENTS 12J, 12K & 12L

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
<b>DISCHARGES NON PLC</b>				
1*	R12K010	SS37400330	Hollacombe	Landfill site River sampling point

<b>DISCHARGES PLC</b>				
1	WWTW3838D	SS29381080	Tamar	Water treatment works
2	WSTW3067FE	SS33080584	Chilsworthy/South	Sewage treatment works
3	WSTW3066FE	SS32860651	Chilsworthy/North	Sewage treatment works
4	WSTW3044FE	SS27170236	Bridgerule	Sewage treatment works
5	WSTW3242FE	SS30800320	Pyworthy	Sewage treatment works
6	WSTW3139FE	SS33970318	Holsworthy	Sewage treatment works
7	WSTW3323FE	SX27119786	Whitstone	Sewage treatment works
8	WSTW3222FE	SX31649760	North Tamerton	Sewage treatment works
9	WSTW3223FE	SX31479737	North Tamerton	Sewage treatment works
10	WSTW3074FE	SX35359910	Clawton	Sewage treatment works
11	WSTW3029FE	SX32829230	Boyton	Sewage treatment works

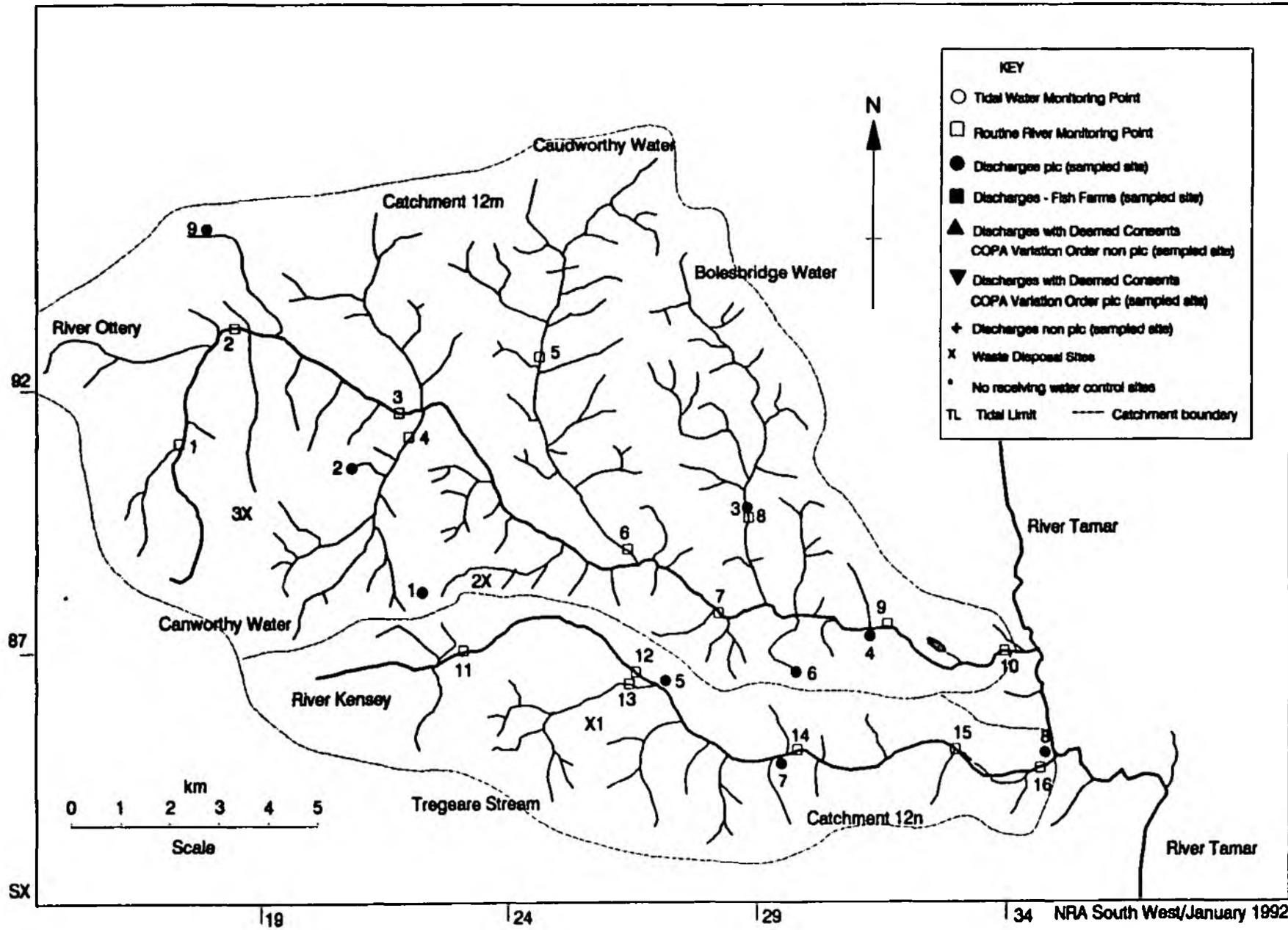
<b>WASTE DISPOSAL SITES</b>				
1	11JADHAL	SS312051	Thorne Farm, Holsworthy	
2	11IACNAL	SS379020	Anvil Corner, Holsworthy	
3	11IAHXAL	SS340030	Tetcott, Holsworthy	

<b>ROUTINE RIVER MONITORING</b>				
1	R12L001	SS28081338	Buses Bridge	Chemical/biological site
2	R12L017	SS28911188	Upper Tamar Res	Chemical/biological site Freshwater Fish Directive
	R12L020	SS289118	Upper Tamar Res	Algological site
	R12L021	SS289118	Upper Tamar Res	EC Surface water abstraction directive monitoring site Algological site
3	R12L018	SS29621085	Lower Tamar Res	Chemical/biological site Freshwater Fish Directive Algological site
4	R12L009	SS29561070	Footbridge/ Res	Chemical/biological site
5	R12L006	SS29530895	Dexbeer Bridge	Chemical/biological site
6	R12L010	SS27711119	Lameral Water	Chemical/biological site
7	R12L007	SS27580893	Moreton Pound Br	Chemical/biological site
8	R12L002	SS28350548	Tamarstone Bridge	Chemical/biological site Freshwater Fish Directive
9	R12L011	SS31000731	Headon Bridge	Chemical/biological site
10	R12L008	SS29950528	Youldon Bridge	Chemical/biological site
11	R12L015	SS27480288	Bridgerule	Chemical/biological site
12	R12L003	SX28739944	Crowford Bridge	Chemical/biological site
13	R12L005	SS30130058	Dualstone Bridge	Chemical/biological site
14	R12L004	SX31769738	Tamerton Bridge	Chemical/biological site
15	R12K003	SS33560415	Rydon Bridge	Chemical/biological site
16	R12K007	SS33870317	Colesmill Stream	Chemical/biological site Dangerous substances site
17	R12K004	SS33860142	Winscott Bridge	Chemical/biological site
18	R12K005	SX31959741	Deer Bridge	Chemical/biological site Freshwater Fish Directive
19	R12L013	SX31909726	Below con/R Deer	Chemical/biological site
20	R12K016	SS37460071	Claw bridge	Chemical/biological site
21	R12K001	SX35339932	Clawton Bridge	Chemical/biological site
22	R12K002	SX327969	Tetcott bridge	Chemical/biological site Freshwater Fish Directive

CLAW, DEER & UPPER TAMAR CATCHMENTS 12J, 12K & 12L (cont)

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
ROUTINE RIVER MONITORING				
23	R12J005	SX34079591	Lana Bridge	Chemical/biological site
24	R12J001	SX32849228	Boyton Bridge	Chemical/biological site
25	R12J006	SX34188913	Bridgetown	Chemical/biological site
26		SX352047	Dunstaple Brook	Biological site
27	R12J002	SX34448833	Druxton Bridge	Chemical/biological site
28	R12J003	SX34838675	Netherbridge	Chemical/biological site Dangerous substances control site
29	R12J004	SX35598490	Polson Bridge	Chemical/biological site Dangerous substances site

# Ottery & Kensey Catchments 12M & 12N



OTTERY & KENSEY CATCHMENTS 12M & 12N

NO	REFERENCE	NGR	LOCATION	ADDITIONAL DETAILS
<b>DISCHARGES PLC</b>				
1	P12M/P/6	SX22248855	Tresmeer (Splatt)	Sewage treatment works
2	WSTW4822FE	SX20829060	Warbstow	Sewage treatment works
3	WSTW3220FE	SX28808940	North Petherwin	Sewage treatment works
4	WSTW3342FE	SX31428733	Yeolmbridge	Sewage treatment works
5	WSTW4576FE	SX27068635	Egloskerry	Sewage treatment works
6	WSTW4638FE	SX29908660	Langore	Sewage treatment works
7	WSTW4794FE	SX29848498	Tregadillett	Sewage treatment works
8	WSTW4644FE	SX35238491	St Leonards	Sewage treatment works
9	WSTW3306FE	SX18209530	Wainhouse Corner	Sewage treatment works
<b>WASTE DISPOSAL SITES</b>				
1	080APYAL	SX261855	Red Down Quarry, Launceston	
2	080ARKAL	SX238884	Tresmeer Railway Cutting, Tremaine	
3	080ARSAL	SX187898	Lane End, Warbstow	
<b>ROUTINE RIVER MONITORING</b>				
1	R12M004	SX17459095	Otterham Mill	Chemical/biological site
2	R12M005	SX18899328	Trengune Bridge	Chemical/biological site
3	R12M001	SX22409173	Canworthy Water	Chemical/biological site
4	R12M008	SX22409147	Canworthy Water	Chemical/biological site
5	R12M010	SX24709263	Canworthy Water	Chemical/biological site
6	R12M011	SX26768887	Caudworthy Water	Chemical/biological site
7	R12M002	SX28558777	Hellescott Bridge	Chemical/biological site
8	R12M012	SX28958920	Bolesbridge Water	Chemical/biological site
9	R12M006	SX31828738	Yeolmbridge	Chemical/biological site
10	R12M007	SX34458682	Ham Mill Bridge	Chemical/biological site Freshwater Fish Directive
11	R12N003	SX23178692	Badgall Bridge	Chemical/biological site
12	R12N001	SX26758643	Badharlick Bridge	Chemical/biological site
13	R12N006	SX26718628	Tregeare Stream	Chemical/biological site
14	R12N004	SX29878499	Truscott Bridge	Chemical/biological site
15	R12N005	SX32708511	Newport	Chemical/biological site
16	R12N002	SX35178478	St Leonards Bridge	Chemical/biological site Freshwater Fish Directive

## **NRA DUTIES AND POWERS**

The Authority has statutory duties and powers in relation to water resources, pollution control, flood defence, fisheries, recreation, conservation and navigation along with various other functions given under the 1989 Water Act.

Whilst most of the Authority's duties and powers are exercised in respect of inland waters in England and Wales, it also has substantial responsibilities for the marine environment around the coast of England and Wales. For pollution control and fisheries purposes it has duties and powers out to distances of three nautical miles and six nautical miles respectively, the six miles being for salmonid protection. For flood defence it is responsible for a large number of sea defences (but not coastal protection which falls within the remit of local authorities).

As well as new duties, the NRA has also inherited other duties and powers under earlier legislation such as the 1963 Water Resources Act, 1975 Salmon and Freshwater Fisheries Act, and 1976 Land Drainage Act.

The Authority also has responsibility for implementing a number of Statutory Instruments, Orders, Notices and Directives relating to the 1989 Water Act. Various European Community Directives on the protection of the aquatic environment eg. Bathing Water Quality, Surface Water Quality, and Freshwater Fishlife also strongly influence its work.

## **NRA MISSION STATEMENT**

The National Rivers Authority will protect and improve the water environment. This will be achieved through effective management of water resources and by substantial reductions in pollution. The Authority aims to provide effective defence for people and property against flooding from rivers and the sea. In discharging its duties it will operate openly and balance the interests of all who benefit from and use rivers, ground waters, estuaries and coastal waters. The Authority will be businesslike, efficient and caring towards its employees.

## **NRA AIMS**

To achieve a continuing improvement in the quality of rivers, estuaries and coastal waters, through the control of water pollution.

To assess, manage, plan and conserve water resources and to maintain and improve the quality of water for all those who use it.

To provide effective defence for people and property against flooding from rivers and the sea.

To provide adequate arrangements for flood forecasting and warning.

To maintain, improve and develop fisheries.

To develop the amenity and recreation potential of waters and lands under NRA control.

To conserve and enhance wildlife, landscape and archaeological features associated with waters under NRA control.

To ensure that dischargers pay the costs of the consequences of their discharges, and as far as possible, to recover the costs of water environment improvements from those who benefit.

To improve public understanding of the water environment and the NRA's work.

#### **REGIONAL PRIORITIES**

The overall priority is to continue the improvements which were started in the last year in the following key areas.

##### **WATER RESOURCES**

- Develop regional strategy document.
- Improve response to licence applications.
- Establish Water Resources planning forum.
- Progress schemes to ameliorate low flows.
- Implement groundwater protection policy.

##### **POLLUTION CONTROL**

- Develop regional strategy document.
- Introduce charging for discharges scheme.
- Implement new consenting policy; begin review of deemed consents.
- Complete 1990/91 survey and consult on water quality objectives.
- Carry out EC Directive requirements.
- Introduce new monitoring programmes for effluents and controlled waters.
- Establish a regional laboratory service.

##### **FISHERIES**

- Develop regional strategy document.
- Review licence and other charging schemes.
- Harmonise stock assessment techniques.
- Extend programme of restoration and rehabilitation of fish stocks.
- Increase action to control illegal fishing.
- Submit new fishery byelaws to MAFF for confirmation.

**RECREATION**

- Continue implementations of Water Act Code of Practice. ....
- Produce strategy for regional sites.
- Improve cost recovery from the recreation service.

**CONSERVATION**

- Establish database for regulatory purposes.
- Produce strategy for regional sites.
- Promote conservation schemes.