NRA Thames 231

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# to Me. Steve Rotberts BLACKWATER RIVER CATCHMENT MANAGEMENT PLAN (Sunbury-ext 3443)

Received 3nd duguet 34 Andrew

# DRAFT ACTION PLAN

## PLEASE SEND YOUR COMMENTS, BY 17TH DECEMBER 1993, TO :

R.M. Hodgins Catchment Management Officer National Rivers Authority Thames Region Riverside Works Fordbridge Road Sunbury on Thames Middlesex TW16 6AP

> Tel: 0932 789833 Fax: 0932 786463



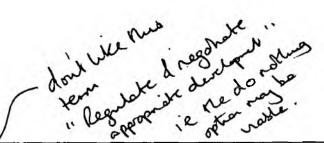
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Please can you update/ as necessary & return a

Steve will call

Fri Ern.



# CATCHMENT-WIDE ACTION PLAN

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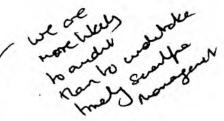
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| ISSUE  | STRATEGY   | ACTION  | PRIORITY | TIMING       | LEAD          | OTHERS          | COST(£K)<br>1993/99 |
|--|--|---|----------|--------------|---------------|-----------------|---------------------|
| 1. Impact of<br>development on<br>river corridors<br>within Blackwater | i Ensure<br>appropriate<br>development               | 1. Continue promotion of appropriate land<br>use policies and influence of development<br>plans                 | High     | 93/4 onwards | NRA           |                 | 5                   |
| catchment  |  | 2. Improve appropriate policy framework in development plans and implement to resist inappropriate development  | High     | 93/4 onwards | CC, BC,<br>DC | NRA             |                     |
|  | 2. Manage quantity and quality of                    | 1. Produce runoff control management plan   | Medium   | 95/6         | NRA           | TWUL,<br>BC, DC | 5                   |
|  | urban & road   | 2. Advise on best practical environmental options   | High     | 93/4         | NRA           | 20,00           | 3                   |
| 2. River<br>maintenance<br>standards                                   | 1. Produce<br>integrated river<br>management plan    | 1. Produce methodology for maintenance<br>standard (NRA R&D Project)  | High     | Complete     | NRA           |                 |                     |
|  |  | 2. Pilot test R&D methodology on<br>Blackwater river  | High     | 94/5         | NRA           |                 | 10                  |
|  |  | 3. Produce agreed Reach Sketch Maps for<br>River Maintenance/Management<br>after multidisciplinary consultation | Medium   | 95/6         | NRA           | CWTs, EN        | 15                  |
|  |  | 4. Publish Standards, Targets and maintain<br>Blackwater to the agreed methodology                              | Medium   | 96/7 onwards | NRA           |                 | 120                 |
|  |  | 5. Carry out similar action for the River<br>Hart   | Medium   | 95/6 onwards | NRA           | CWTs, EN        | 85                  |
| 3. Groundwater<br>quality  | 1. Implement NRA<br>Groundwater<br>Protection Policy | 1. Promote Groundwater Protection Policy<br>to local Planning Authorities                                       | High     | 93/4 onwards | NRA           | CC,<br>BC, DC   | 2                   |

Note: Costs shown are those incurred by the NRA, are indicative and subject to detailed project justification.

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# BLACKWATER RIVER ACTION PLAN (I)

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| ISSUE  | STRATEGY  | ACTION  | PRIORITY | TIMING           | LEAD     | OTHERS                       | COST(£K)<br>1993/99 |             |
|--|---|---|----------|------------------|----------|------------------------------|---------------------|-------------|
| 1. Impact of<br>development on<br>Blackwater River | 1. Minimise<br>adverse impact of<br>Blackwater Valley   | 1. Finalise design of river works and mitigation proposals                                    | High     | 93/4             | HCC, SCC | NRA                          |                     |             |
| corridor   | Road  | 2. Implement sympathetic river works and mitigation proposals                                 | High     | 93/4, 94/5, 95/6 | HCC, SCC | NRA                          |                     |             |
|  |   | 3. Monitos works after construction   | Medium   | 93/4 onwards     | NRA      | HCC, SCC                     | 5                   | - net       |
|  | 2. Develop and<br>implement habitat<br>enhancement      | 1. Commission strategic river corridor<br>habitat survey, formulate enhancement<br>programme  | High     | 94/5             | NRA      | EN, CWTs                     | 15                  | nis<br>Soft |
|  | programme   | 2. Implement enhancement works and<br>management regime accorporating<br>geomptograd provides | Medium   | 95/6 onwards     | NRA      | CC, BC,<br>DC,<br>Developers | 50+                 | 4           |
|  | 3. Develop and<br>implement<br>landscape<br>enhancement | 1. Commission strategic landscape<br>assessment, formulate enhancement<br>programme           | High     | 94/5             | NRA      | CoCo,<br>CC, BC,<br>DC       | 10                  |             |
|  | programme   | 2. Implement enhancement works  | Medium   | 95/6 onwards     | NRA      | CC, BC,<br>DC,<br>Developers | 50 +                |             |
|  | 4. Maintain,<br>develop and<br>improve fish             | 1. Continue programme of fishery<br>assessments   | High     | 93/4, 98/9       | NRA      |                              | 10                  |             |
|  | populations   | 2. Implement habitat improvements   | Medium   |                  | NRA      | CC, BC,<br>DC,<br>Developers | 50                  | •           |

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| BLACKWATER | RIVER | ACTION | PLAN | (11) | ÷ |
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| ISSUE                                   | STRATEGY  | ACTION   | PRIORITY | TIMING                                   | LEAD       | OTHERS               | COST(£K)<br>1993/99 |
|---|---|--|----------|--|------------|----------------------|---------------------|
| 2. Water quality in<br>Blackwater River | 1. Improve water<br>quality downstream<br>of Camberley STW<br>(3.3km reach failed<br>RQO in 1990)                       | 1. Improve Camberley STW   | High     | Complete                                 | TWUL       | NRA                  |                     |
|   | 2. Maintain quality<br>improvement<br>downstream of<br>Aldershot Military<br>STW to Cove<br>Brook                       | 1. Review consent at Ash Vale STW  | Medium   | 94/5                                     | NRA        | TWUL                 | 3                   |
| e<br>G                                  | 3. Improve water<br>quality d/s of Cove<br>Brook to R.Loddon<br>to meet long term<br>objective (1b)                     | 1. Review consent at Sandhurst STW   | Medium   | 94/5                                     | NRA        | TWUL                 | 3                   |
|   | 4. Manage impact<br>of potential changes<br>to trade effluent<br>treatment at<br>Camberley STW                          | 1. Review consent and monitor as appropriate   | High     | 95/6 (dependent upon<br>TWUL proposals)  | NRA        | TWUL                 | 15                  |
|   | 5. Implement<br>Statutory Water<br>Quality Objectives<br>for 'Fisheries<br>Ecosystem' use in<br>Blackwater<br>Catchment | <ol> <li>Submit proposals to DOE and conduct<br/>informal consultation</li> <li>Implement</li> </ol> |          | Dependent upon DOE<br>Dependent upon DOE | NRA<br>NRA | TWUL,<br>Dischargers |                     |

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Note: Costs shown are those incurred by the NRA, are indicative and subject to detailed project justification.

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|     | ISSUE                                 | STRATEGY   | ACTION   | PRIORITY | TIMING             | LEAD | OTHERS                         | COST(£K)<br>1993/99 |
|-----|---------------------------------------|--|--|----------|--------------------|------|--------------------------------|---------------------|
|     | 2. Water quality in                   | 6. Review  | 1. Continue monitoring programme   | High     | 93/4 onwards       | NRA  |                                | 10                  |
| en. | Blackwater River<br>(continued)       | suitability of river<br>for appropriate<br>water contact | 2. Await Government's proposals on SWQOs for Contact Sports  | High     | Dependent upon DOE | DOE  | NRA                            |                     |
|     |                                       | sports   | 3. Cost-Benefit Analysis   | Medium   | Dependent upon DOE | NRA  |                                | 5                   |
|     |                                       | 1. Reduce  | 1. Implement Pollution Prevention Initiative   | High     | 93/4               | NRA  | Industry                       | 5                   |
| •   |                                       | excessive number<br>of oil pollution<br>incidents        | 2. Monitor surface water outfalls  | Medium   | 93/4 onwards       | NRA  | TWUL,<br>BC, DC                | 25                  |
|     |                                       |  | 3.Investigate pollution incidents: prosecute if appropriate  | High     | 93/4 onwards       | NRA  | TWUL,<br>BC, DC                | 100                 |
|     | 3. Excessive                          | 1. Formulate   | 1. Carry out DO survey programme   | High     | 93/4 onwards       | NRA  |                                | 5                   |
|     | Macrophyte growth                     | management<br>strategy                                   | 2. Propose designation of Blackwater as a<br>'Eutrophic Sensitive Area' under EC<br>Directive on Wastewater Treatment leading<br>to phosphate removal at STW | High     | 93/4               | NRA  |                                |                     |
| 4.4 |                                       |  | 3. Improve management techniques   | Medium   | 94/5 onwards       | NRA  |                                |                     |
|     | 4. Inadequate flood defence standards | 1. Improve<br>standards to                               | 1. Carry out multifunctional feasibility study   | High     | Complete           | NRA  | EN,CoCo,<br>CWTs,CC,<br>BC, DC | 10                  |
|     | 20 e                                  | appropriate level  | 2. Design environmentally sympathetic and economically justifiable scheme  | High     | 93/4               | NRA  |                                | 15                  |
|     |                                       |  | 3. Implement scheme  | High     | 94/5               | NRA  |                                | 300                 |
|     |                                       |  | 4. Monitor   | Medium   | 95/6               | NRA  |                                | 2                   |

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### BLACKWATER RIVER ACTION PLAN (III)

| ISSUE  | STRATEGY                                     | ACTION   | PRIORITY | TIMING                           | LEAD     | OTHERS | COST(£K)<br>1993/99 |
|--|--|--|----------|----------------------------------|----------|--------|---------------------|
| 1. Flooding at   | 1. Improve flood                             | 1. Implement scheme on main river  | High     | Completed 93/4                   | NRA      |        | 90                  |
| Crondall from River<br>Hart and minor<br>water courses | defence standards                            | 2. Implement scheme on minor<br>watercourses   | High     | 93/4                             | HCC, HDC | NRA    | 25                  |
|  |  | 3. Identify other areas at risk, investigate and alleviate                                   | High     | 93/4 to 96/7                     | HCC, HDC | NRA    | 50?                 |
| 2. Water quality in the River Hart and                 | 1. Improve water<br>quality downstream       | 1. Review consent conditions   | High     | 93/4                             | NRA      |        | 5                   |
| Fleet Brook  | of Fleet STW                                 | 2. Improve Fleet STW to meet tightened consent conditions                                    | High     | 94/5. 95/6, 96/7                 | TWUL     | 14.55  |                     |
| 3. Effect of Itchel<br>abstraction on local            | 1. Evaluate<br>situation as part of          | 1. Assess priority for detailed study,   | Medium   | Completed 93/4                   | NRA      |        | 1                   |
| springs and river<br>flows in upper Hart               | regional review                              | 2. Review situation  | Medium   | 94/5 onwards                     | NRA      | NRA    | 2                   |
| 4. Degraded habitats                                   | 1. Formulate and<br>implement<br>enhancement | 1. Undertake River Corridor Habitat and Fishery Survey                                       | High     | 94/5, 95/6                       | NRA      |        | 20                  |
|  | programme                                    | 2. Prepare management and enhancement<br>strategy. Use geomydeloned<br>Surg for he Blacksoft | High     | 95/6.96/7                        | NRA      | CC BC  |                     |
|  |  | 3. Undertake habitat enhancement works   | Medium   | 95/5 onwards                     | NRA      | DC     | 20                  |
| 5. Poor population<br>of fish in upper                 | 1. Investigate<br>situation and              | 1. Undertake targetted fishery survey  | Medium   | 94/5                             | NRA      |        | 3                   |
| reaches of Hart  | formulate                                    | 2. Formulate recommendations   | Mcdium   | .94/5                            | NRA      |        | 1                   |
|  | appropriate<br>solutions                     | 3. Implement recommendations   | Mcdium   | Dependent upon<br>survey results | NRA      |        |                     |

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RIVER HART ACTION PLAN

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| ISSUE  | STRATEGY  | ACTION  | PRIORITY | TIMING                       | LEAD | OTHERS                     | COST(£K)<br>1993/99 |
|--|---|---|----------|------------------------------|------|----------------------------|---------------------|
| 1. Water quality on<br>River Whitewater                    | 1. Investigate cause<br>of apparent low   | 1. Undertake studies  | High     | 93/4                         | NRĄ  |                            | 2                   |
|  | dissolved oxygen  | 2. Implement recommendations  | Medium   | 94/5 onwards                 | NRA  |                            |                     |
| 2. Degraded habitats                                       | 1. Formulate and<br>implement<br>enhancement  | 1. Undertake River Corridor Habitat and<br>Fishery Survey   | High     | 93/4, 94/5                   | NRA  |                            | 20                  |
|  | programme   | 2. Prepare management and enhancement<br>strategy. Use georgelynes                                  | High     | 94/5. 95/6                   | NRA  |                            |                     |
|  |   | 3. Undertake habitat enhancement works  | Medium   | 94/5 onwards                 | NRA  | CC, BC,<br>DC<br>Landowner | 20                  |
| 3. Concern over low<br>flows in upper<br>Whitewater        | 1. Investigate<br>situation and<br>formulate  | 1. Assess river using NRA standardised methodology  | High     | 93/4                         | NRA  | MSWC                       | 3                   |
|  | appropriate<br>solutions  | 2. Investigate options, including reducing<br>abstraction at Greywell and use of new<br>Bray intake | Medium   | Dependent upon<br>assessment | NRA  | мѕ₩С                       | 10                  |
|  |   | 3. Implement appropriate action   | Medium   | Dependent upon study         |      |                            |                     |
| 4. Recognition of<br>special value of<br>Whitewater valley | <ol> <li>Consider<br/>designation of<br/>Whitewater Valley<br/>Countryside<br/>Heritage Area</li> </ol> | 1. Promote consideration of benefits,<br>implications and cost of such designation                  | Medium   | 93/4                         | NRA  | HCC,<br>HDC,<br>BDBC       | I                   |

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### BASINGSTOKE CANAL ACTION PLAN

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| ISSUE .   | STRATEGY  |   | PRIORITY     | TIMING                     | LEAD       | OTHERS  | COST(£K)<br>1993/99 |
|---|---|---|--------------|----------------------------|------------|---------|---------------------|
| 1. Balance between<br>ecological value and<br>recreation/amenity<br>use | 1. Formulate<br>multidisciplinary<br>management<br>strategy | <ol> <li>Increase participation by NRA in<br/>Basingstoke Canal Authority Liaison Group</li> <li>Continue fisheries survey programme</li> </ol> | High<br>High | 93/4 onwards<br>93/4, 98/9 | NRA<br>NRA | BCA, EN | 1                   |
| 2. Dependence of<br>ecological value on<br>water quality                | 1. Maintain water<br>quality                                | 1. Monitor water quality  | High         | 93/4 onwards               | NRA        | BCA, EN | 5                   |
| 3. Proposed<br>increased<br>navigational use                            | 1. Assessment of<br>implications for<br>water demand        | 1. Consider conditions for abstraction licence  | Medium       | Dependent upon BCA         | NRA        | BCA     | I                   |

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| ISSUE                                      | STRATEGY  | ACTION   | PRIORITY | TIMING  | LEAD            | OTHERS                   | COST(£K)<br>1993/99 |
|--|---|--|----------|---|-----------------|--------------------------|---------------------|
| 1. Continued long<br>term deterioration of | 1. Ensure<br>appropriate  | 1. Evaluate MoD silt traps                               | High     | 93/4, 94/5  | NRA             | MOD,<br>HDC,FPS          | 2                   |
| ccological value                           | management of<br>pond and MoD<br>land upstream on<br>Gelvert Stream | 2. Investigate further options to prevent silt pollution | Medium   | Dependant upon<br>effectiveness of<br>existing silt traps | MOD             | NRA,<br>HDC<br>FPS       |                     |
|  |   | 3. Finalise Draft Management Plan                        | High     | 93/4, 94/5  | FPS             | HDC, EN<br>HWT,<br>NRA   |                     |
|  | 2   | 4. Prepare Fishery Management Strategy                   | Medium   | 97/8 future   | NRA             | HDC, FPS                 | 1                   |
|  | 5. Monitor the status of Macrophyte<br>Communities                  | Medium   |          | EN  | NRA,FPS,<br>HDC |                          |                     |
|  |   | 6. Set SWQO for Pond                                     | Medium   | Dependent upon DOE  | NRA             | HDC <b>,F</b> PS,<br>MOD | 1                   |

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FLEET POND ACTION PLAN

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#### KEY TO ABBREVIATIONS

BBONT Berkshire, Buckinghamshire and Oxfordshire Naturalists Trusts

- BC Borough Council
- BCA Basingstoke Canal Authority
- BDBC Basingstoke & Deane Borough Council
- CC County Council

CoCo Countryside Commission

CWT County Wildlife Trust

- DC District Council
- DO Dissolved Oxygen
- DOE Department of the Environment
- EC European Community
- EN English Nature
- FPS Fleet Pond Society

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Hampshire County Council нсс HDC Hart District Council Hampshire Wildlife Trust HWT Ministry of Defence MOD Mid-Southern Water Company MSWC NRA National Rivers Authority R&D Research and Development SCC Surrey County Council STW Sewage Treatment Works Statutory Water Quality Objectives SWQO Surrey Wildlife Trust SWT

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TWUL Thames Water Utilities