## Water-Linked Ecosystems: Research project portfolio for 2007/08

THRUST 2: ECOSYSTEM MANAGEMENT AND UTILISATION			
Title (New projects indicated by *)	Contractor	Term	
Programme 1: Ecological Reserve			
Environmental water requirements in non-perennial systems (K5/1414 continued)	University of the Free State, Centre for Environmental Management	01/04/05 – 31/03/08	
Development, testing and installation of a real-time Ecological Reserve implementation method for the Thukela River	Institute for Water Research, Rhodes University	01/04/05 – 31/03/07	
Programme 2: Estuary management			
The freshwater requirements of temporarily open / closed estuaries on the South Eastern and South Western Cape coasts	SA Institute for Aquatic Biodiversity	01/04/05 – 31/03/08	
Valuation of estuary services in SA	Nelson Mandela Metropolitan Univ, Economics	01/04/04 – 31/03/08	
Integrated development planning for estuaries	Institute of Natural Resources	01/04/04 – 31/03/07	
CERM: East Kleinemonde Estuary modelling study	Anchor Env Consultants	01/04/06 – 31/03/10	
*Estuaries and economic empowerment	UKZN Centre for Environment, Agriculture & Development	01/04/07-31/03/2010	
Programme 3: Ecosystem health			
Osmoregulation in freshwater invertebrates in response to salt pollution	Institute for Water Research, Rhodes University	01/04/05 – 31/03/07	
The effects of streamflow manipulation on the intermediate hosts and vector populations of disease and the transmission of associated parasites	Institute of Natural Resources	01/04/05 – 31/03/07	
Conservation model for threatened fish species	University of Limpopo	01/04/06 – 31/03/09	
*Development of an ecosystem risk assessment model to determine the risk of EDCs in the water environment	Rhodes University, Institute for Water Research	01/04/07 – 30/09/2009	
Programme 4: Environmental water quality			
Application of chronic (sub-lethal) toxicity endpoints to the development of resource quality objectives	Institute for Water Research, Rhodes University	01/04/04 – 31/03/07	
The application of ecological informatics modelling approaches to South African conditions with preliminary testing on algal blooms	North-West University	01/04/06 – 31/03/08	
*Development of a diatom-based biomonitoring protocol for South African rivers and streams  Phase III: Regional testing, method refinement & calibration; index formulation and river health programme accreditation	DH Environmental Consulting	01/04/ 07– 31/03/2010	
Programme 5: Endocrine disrupting compou	unds (EDCs) in water sources		
Assessment of environmental exposure & health risk in an area where ongoing DDT spraying occurs	University of Pretoria, Department of Andrology	01/04/06 – 31/03/09	
Amphibian metamorphosis as a biological model to study the effect of endocrine contaminants on thyroid function	University of Stellenbosch Department of Zoology	01/04/06 – 31/03/08	
*Environmental assessment in an area where ongoing DDT spraying occurs	Rhodes University, Institute for Water Research	01/04/07 – 31/03/2008	
Programme 6: Socio-economic considerations			
*Framework and manual for the valuation of goods and services from aquatic ecosystems for the Resource Directed Measures (RDM)	CIC International	01/04/07 – 31/03/09	

*Development and testing of a coherent, integrated and practicable set of indicators for the sustainable use and management of communal wetlands and their catchments, with a strong focus on rehabilitation.	Association for Water & Resource Development (AWARD)	01/01/07–30/06/2008	
Programme 7: Ecosystem governance			
Enriching freshwater conservation planning and management (Previously in Programme 6)	CSIR Environmentek	01/04/06 – 31/03/08	
*Management effectiveness in implementing cross-sector policy objectives for conserving freshwater biodiversity	CSIR Natural Resources & the Environment	01/01/07- 31/03/2009	
*KNP river governance (Holistic Rivers Programme)	To be advised	01/04/07- 31/03/09	