# A case study on implementing the Oracle project management applications in a large and complex organisation

Terry Hume - *NIWA*Stu Keast - Asparona







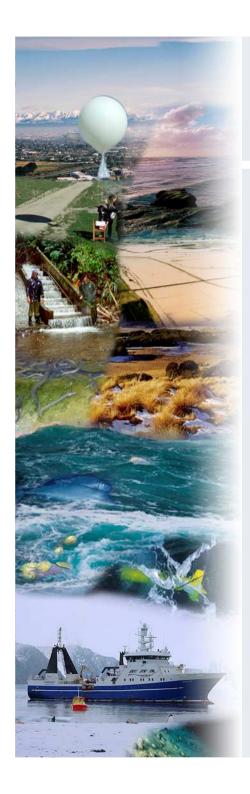
#### This presentation

NIWA are implementing major step changes to project and financial processes and tools to improve delivery in research & consultancy

- NIWA and its business
- Business drivers
- Moving to a new system
- The Oracle solution
- Project status





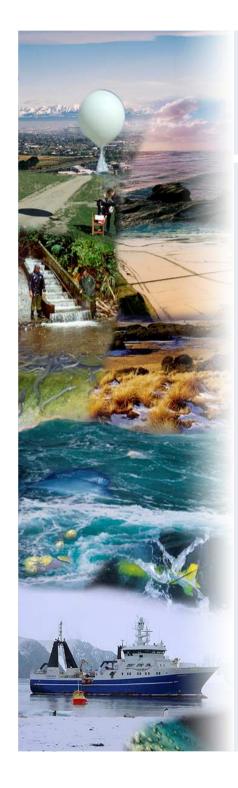


#### Who is NIWA?

- National Institute of Water & Atmospheric Research
- A Crown Research Institute 1992
- NZ's leading science provider in the water and atmosphere area... "Leading environmental science to ensure the sustainable use of natural resources for New Zealand and the planet"
- Taihoro Nukurangi







#### Pan - NZ coverage

Revenue

Assets

750 employees

4 main sites

- Auckland
- Hamilton
- Wellington
- Christchurch

11 smaller sites





#### **National Science Centres**

Atmosphere

**Natural Hazards** 

Climate

Freshwater

Coasts

**Oceans** 

**Fisheries** 

**Biodiversity & Biosecurity** 

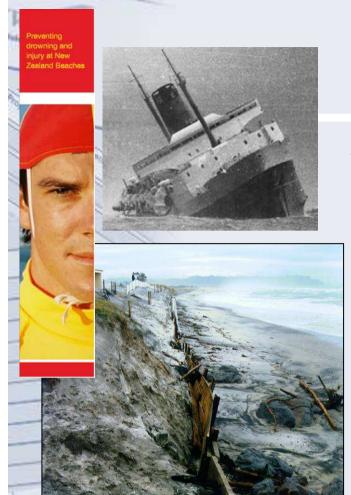
Aquaculture & Biotechnology

Maori Development

Energy

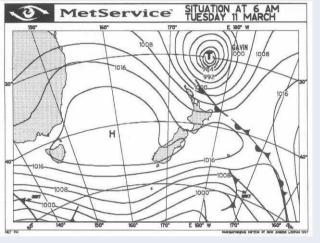






#### **Coastal hazards**

Making New Zealand communities more resilient to weather driven, and coastal and marine geological hazards, now and in a changing climate.





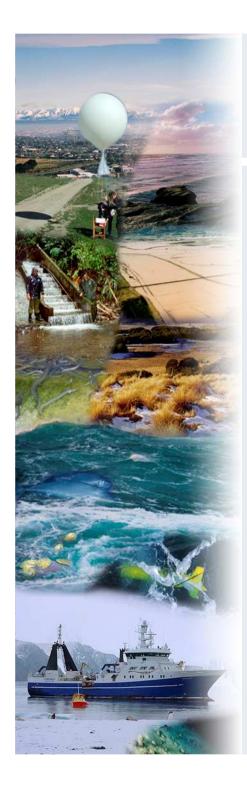


#### Work includes managing...

- National environmental monitoring network (climate, hydrological, satellite, sea-level, lasers, balloons)
- Nationally significant collections & databases (e.g., climate, water, atmosphere, marine invertebrates)
- Specialist laboratories
- Aquaculture facilities
- Large array of specialty vessels and vehicles





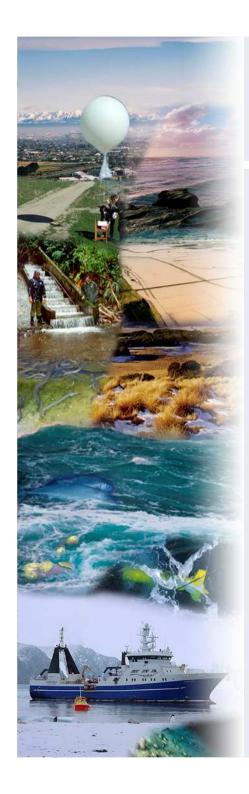


#### Large project diversity & volume

- Knowledge based business
- Earn revenue selling time Resourcing information is a key business metric
- 1600 projects, 1000's of tasks and milestones and deliverables to track...
- Project budgets.... several \$K to several \$M







#### Large project diversity & volume

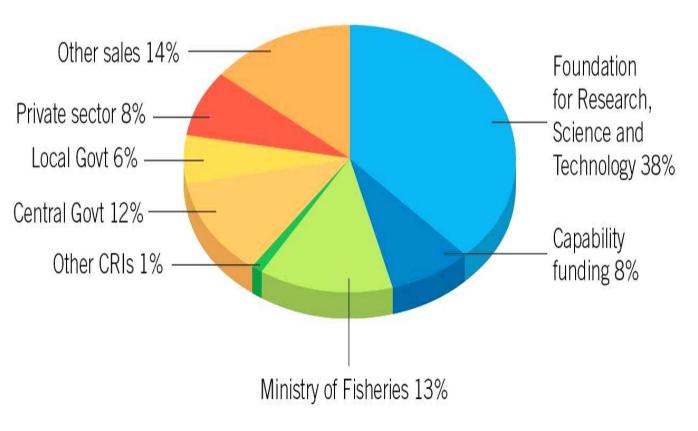
- Single and multi-year projects and programmes
- Multi-currency, multi-client, subies
- Multi-disciplinary & cross-region collaboration,
- Internal & external projects
- Research, consultancy, IT, Capex, monitoring
- Fog, Quest, Movie, Painting by numbers







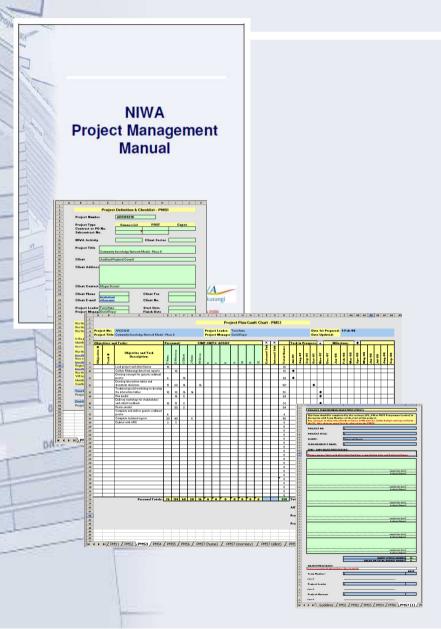
#### Varied client base







#### How we handle projects now



- \*15 year old paper based system supported by...
- Oracle costing and billing
- Spreadsheets and word docs
- File storage

\*Also used to manage H&S, Performance

\*Project Admin Teams + 400 PMs







### What we want to avoid...

Coastal Group Current and potential commitments
Last condition on E. C. on

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Job Code	Title	Leader	Status	llo	pp o	oman	reen	ancock	eun	venden	iftchard	amsay	ickards	tephens	ale F	Draft Report	Final Report	Feb	Mar	Apr	May	Jun	2009 Jul	Aug	Sep	Oct	Nov	Dec	2010 Jan	Feb	Mar	Apr	May	1
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RC07137	SE Manukau Harbour Model	Green	On				0	-10			-38				De	elivered	31-Mar-09			Green /	Aaroon /	Pritchard												L
RC08105	Stormwater sediment	A. Davies	On					-							3																	-		Į.
RC08216 RC09212	Mangrove Habitat expansion Tamaki Strait Tier II - 0708	Swales Chiaroni	On On			-16	4						_		-59 D	elivered	31-Dec-08		Swales													$\vdash$		Ł
C09212	Tamaki Strait Tier II - 0706	Chiaroni			30			5	0	-			-																			-		ł
RC09213	Suspension feeder	Hewitt	On On		30	50		_									30-Jun-09						Coco											t
RC09218	Mahurangi Network model	Hume	On		- 1		0		-23				-5		16 23	-Feb-09	20-Mar-09		Hu	ıme														t
RC09219	ARC - Miscellaneous	Green	On				43	_					-						T i															t
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RC09501	Sediment Yield Update	M. Hicks	On												3																			1
N200705	Risk assessment framework Obj 1	A. McDiarmid	On						3																									Į
N200705	Risk assessment framework Obj 2	A. McDiarmid	On						4																_							-		Į
DP09216 Al09201	Tauranga Harbour Sediment	Hume	On		-22	-9	48 -	183 -1	6 -43	-31	-370	47		_	39 Dec	/Feb/Aug	_		ritchard	/ Aroon	/ Hume				Green					_		$\vdash$		ł
AA091	Coastal Instruments MS Analysis of sediments	Stephens	On		_			1	-	-	-	_	-	5	40						_											-		ł
RAC092	Lake Oxygen Budgets	A. Lorrey P. Verburg	On On		15			_	_	-		_	-		40															_		-		ł
RBE094	Review of ecology & m	D. Morrisev	On		10			_			-				65																			t
RBK092	Urban Stormwater Contaminant	Green	On				149										30-Jun-09						Green											t
RBL092	Taupo Monitoring Buoy	Gibbs	On		-24		1.10	-4	3										Hart - I	buov fail	ure repai	r												t
RCC092	Iwi Estuarine toolkit	Swales	On							10					40																			Ť
RCO091	Contaminant source ID	J. Moores	On				35																											î
WL09201	Waterview to Royal Road	Bell	On	-7	-23			-4	3	1							13-Mar-09		Hart															1
F09205	WCRC57	Ramsay	On									31					31-Mar-09			Ramsay														1
VC09502	Canterbury wave buoy	J. Walsh	On On			3																												Į.
/W09205	Benthic impacts of acquaculture	H. Giles			30		1	7	U	1									Budd,	Hart (po	ssibly)													Į.
AL09202	Galai Commercial: 1 Galai Commercial: COMM	Ovenden	On On				-			600																				-		-		ł
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MV09303	Great South Basin	M. Williams	On	U		35														Gomen	(Review	)												ł
DL08203	Port of Otago - modelling	Bell	On	-216		30	-104	-41			4	22		15	10 De	elivered	28-Feb-09		Green	1	,													t
AG09201	Kaipara Inlet Modelling	Stephens	On	20			116		17		l í l	197		327			30-Apr-09				Reeve /	Stephens												f
RC09202	Storm tide return periods	Stephens	On	14			1					5 3		-37			13-Mar-09		Step	hens - L	ate but e	xtension	agreed	with WR										t
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CD092	Lake effectes	P. Verburg	On					1	5					-8																				J.
CF092	Stuff	Green	On				-8																											Į
CG092	Tools & Tracking	Green	On								90																							Į
CH092	Estuary Dynamics	Green	On		20 1	05	60	348 1	D		333												Coco (10	05), Gree	n (60), F	lancock	(348)					-		Į
QCL092	Lake Taupo	Green	On			_		_			30						_													_		$\vdash$		ł
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QRA092 QRA092	Lowland Rest: SHAD	J. Quinn	On On	_	_			_	_	-3 -10	-	_	-	_	_			_		_								-		_		-		ł
QRE092	Recolonisation	J. Quinn	On		_			_	_	1.0	-	64											Reeve (6	64)										t
BFB092	Coastal B&B	Hewitt	On		_			_	15	-		04	2				_	_		$\overline{}$	_			(more ho	ure likah	()				_		-		t
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CAU093	Urban Climate Change adaptation	Tait	On			40						43												,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, (100)									Ť
NAA093	National Centre: Maori	E. Williams	On										47																					î
NAF093	National Centre - Hazards	Poulter	On	35								47																						î
NAG095	National Centre - Coasts	H-Willams	On	34			37																											1
OFF092	Fragmentation Ecology	Hewitt	On		-57	75																	Coco (75	5)										J.
OFF092	Fragmentation SUBT	Hewitt	On		-4	55	$\perp$																											Į
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WEB095	Groundwater: Karst	Fenwick	On					_	_	-			-13					_						(more ho			l					-		ł
MSL092 SKA092	Sea-level-regional Riskscape: Hazard	Bell Swales	On On	123 98		_		_				150 53 23											Bell (123	3), Rams	ay (150).	Reeve	(53)			_		$\vdash$		ł
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SFA095	Sustainable	B. Hayden	On	60	15		-	2	2	-	-	_	-		_			-		$\overline{}$			Bell (60)									-		ł
TWF083	Customary Fisheries	K. May	On	00	10		1 1	-   -	-				-14										OUI (00)											ł
QQE092	Co-ordination	Tanner	On										106										Rickards	s (106)										1
RHC092	Coastal Dynamics	Coco	On	23	28 3	83 85	150	2	B 39			28	-27	329									Coco (3	83), Gree	n (150)	Gorman	(85), S	tephens	(320)					f
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#### **Business drivers**

We have a complex and large business that is not well served by our 1994 paper-based system

- Deadlines, budgets, scope, deliverables
- Integrating 'financial plans' & 'work plans'
- Sharing staff workloads across NIWA
- Pan-NIWA visibility of opportunities
- More visibility for management
- Increasing need for up-to-date info
- Managing COI situations
- Managing compliance and audit requirements





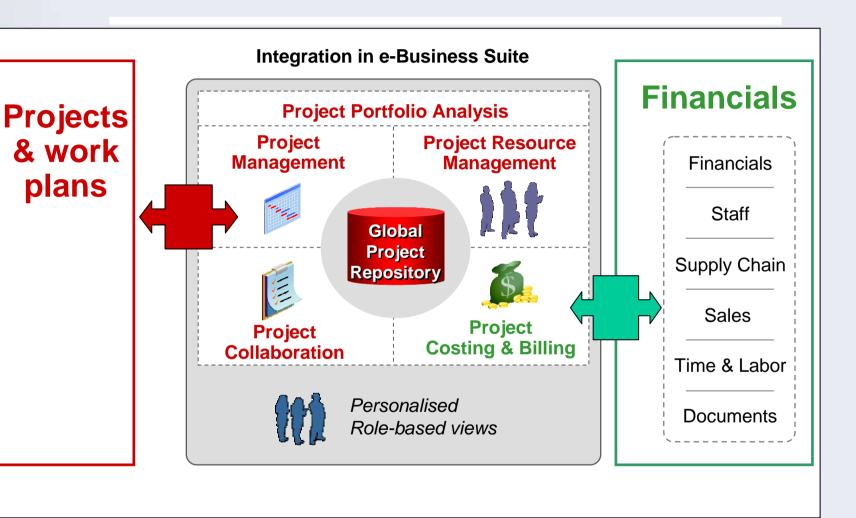
#### Moving to a new system

- Evolution of existing processes
- Building on reviews of the last 2 3 years of our project management needs
- Implemented Oracle financial upgrade 10.5.9 to 12.0.6 ...web configured interfaces (e.g., MyProjects)
- Licensing
- NIWA intranet upgrade options for on-line supporting documents and tools
- NIWA Team...Scoping Study...Pilot Implementation
- People, Processes and Tools





#### The NIWA Solution (Pilot)



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#### **Project Management**

- Plans, forecasts, budgets
- Progress
- Issues, deliverables and actions
- Performance reporting
- Exception management
- Fully integrated with the current Oracle system
- Secure role based







#### **Resource Management**

- Manager and staff visibility of scheduled work/availability
- Planning on a project using staff and other resources
- Fully integrated with current staff records
- Competencies and resumes included







#### **Project Collaboration**

- Team Member / Manager visibility of projects and work
- Integrated with the other project based systems
- Personalisable user interface/ views
- Email and desktop notifications







#### Fit to requirements

- ✓ Integrated with financials and project costing
- ✓ Flexible user interface
- ✓ Visibility of all projects and status
- ✓ Role based security
- ✓ Full project management functionality
- ✓ Staffing resource management
- Manage by exception
- ✓ Program and portfolio management







#### Gaps

- ✓ Project status workflow
- Integration with personal calender
- ✓ Collect information on Maori interactions –
  "Status report"
- ✓ Staff approval workflow
- ✓ Email alerts





## Look & Feel





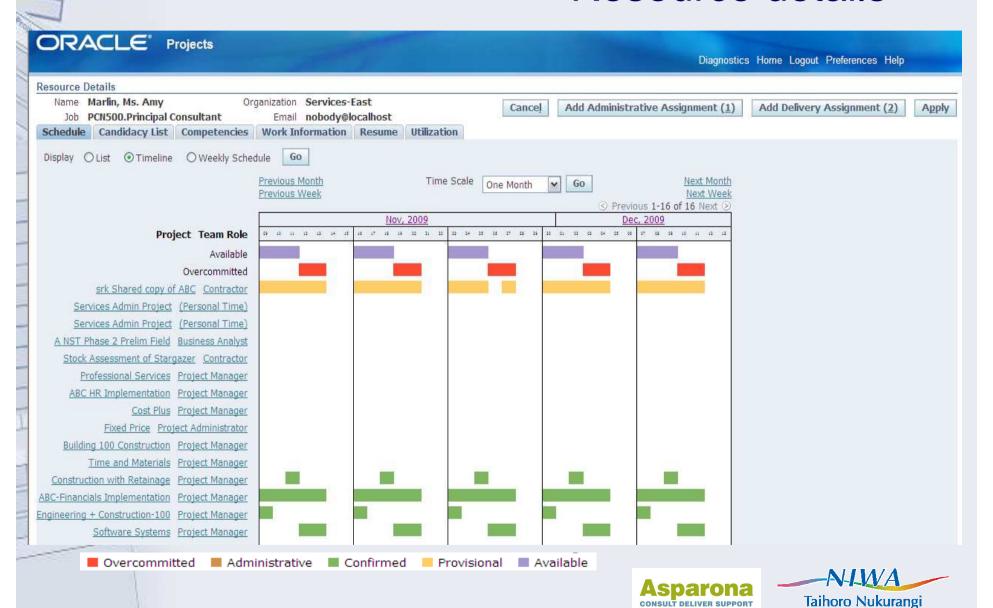
#### Individuals - Home page



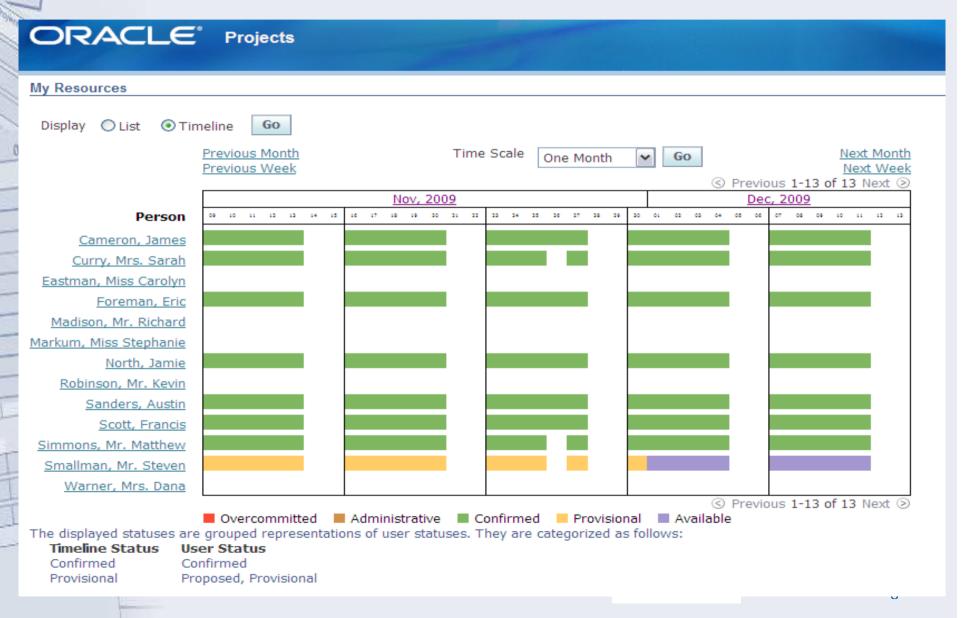




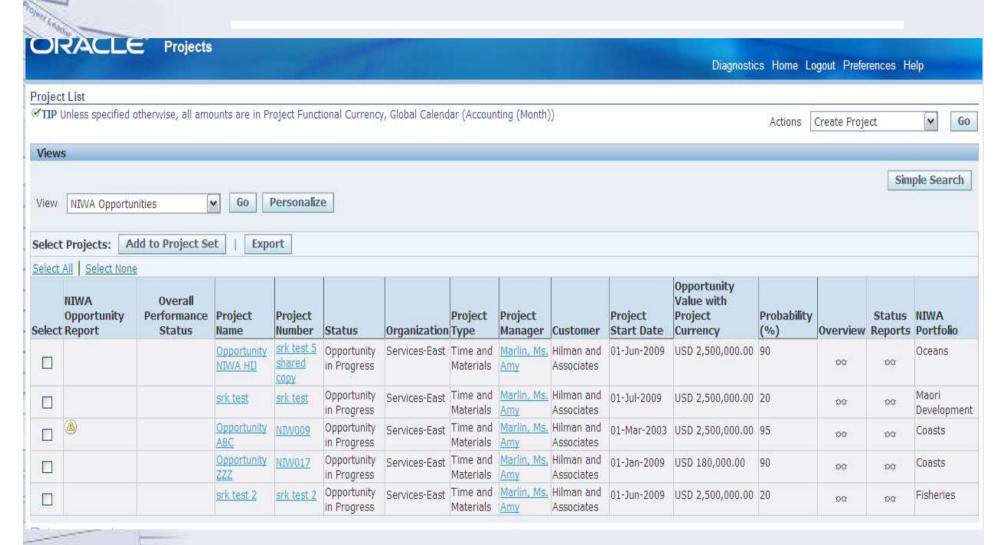
#### Resource details



#### My resources



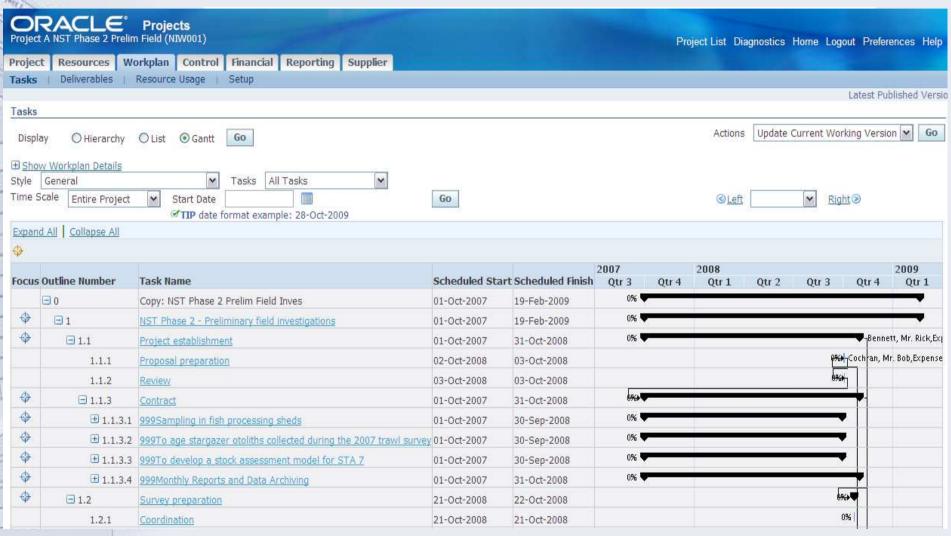
#### View – user definable







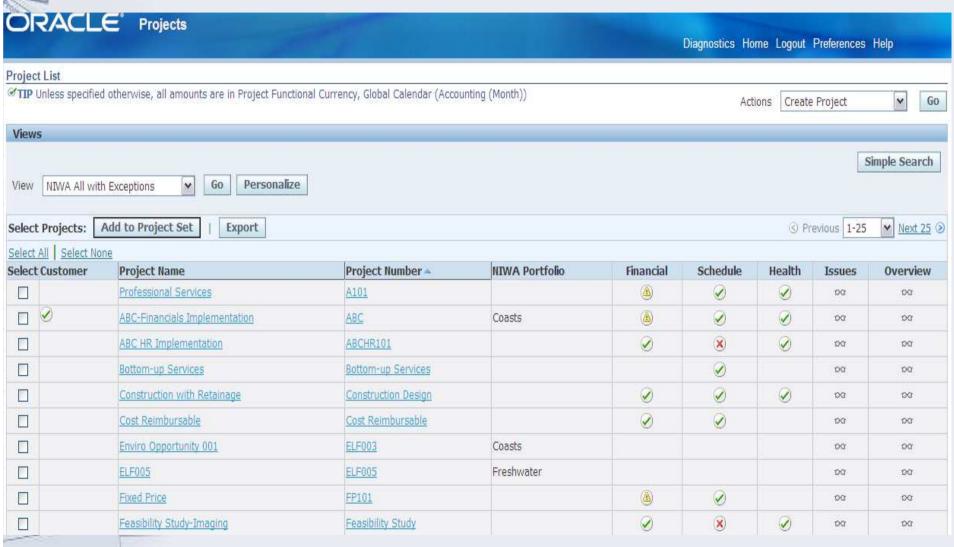
#### Views - 'Gantt'







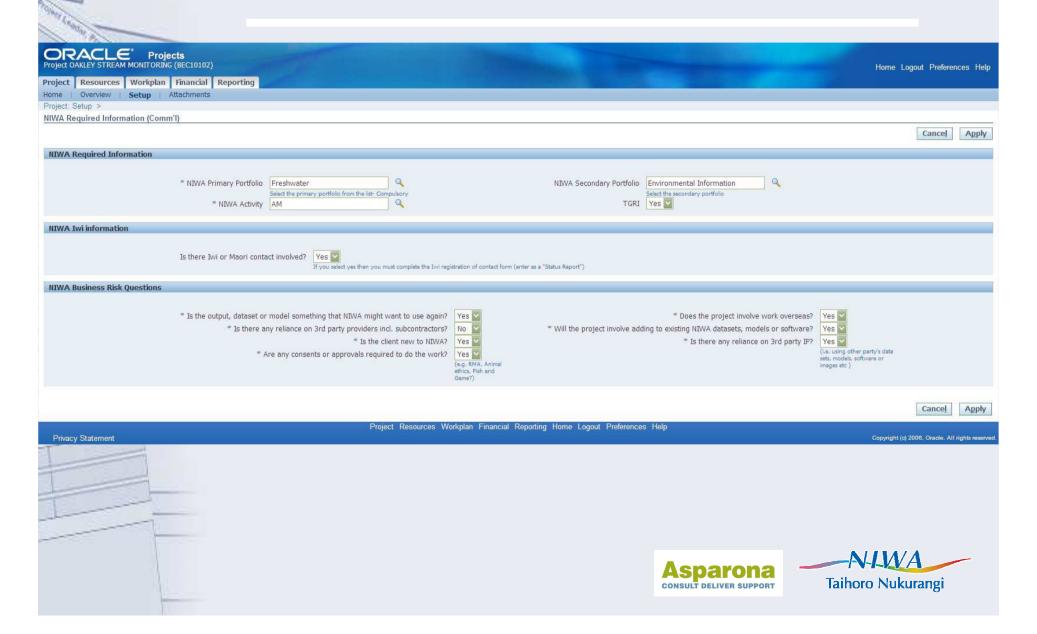
#### **Exceptions**







#### User defined attributes

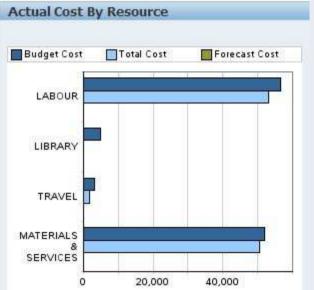


#### Review and publish



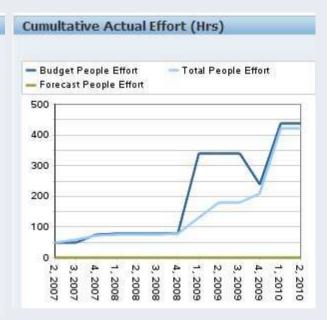


#### Performance reporting



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#### **Project status**

- Oracle product challenges
- Where the project is at





#### **Acknowledgements**

NIWA project team -Terry Hume, Janine Irvine, Paul Sticovich, Kate Thomson



Asparona project team -Stu Keast, Darren Wenham, Anthony Daniel, Jeremy Cope

