

中英合作“水资源需求管理援助项目”
Water Resources Demand Management Assistance Project

Water Resources Demand Management Assistance Project

Six Month Progress Report

No 8 : January 2010

Ministry of Water Resources, PRC

中华人民共和国水利部

Central Project Management Office CPMO
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Summary

This report is the Eighth (8th) Six Monthly Progress Report and relates to the period from July 1st 2009 to the end of December 2009.

The Inception Report contains information related to progress from the start of the Project, taken to be July 1st 2005, to January 2006. The first six month progress report covered the period January 2006 to the end of June 2006. The second six month progress report covered the period July 2006 to the end of January 2007. The third six month progress report covered the period February 1st to June 30th 2007. The fourth six month progress report covered the period July 1st 2007 to December 31st 2007. The fifth six month progress report covered the period January 1st 2008 to June 30th 2008. The Sixth six month progress report covered the period July 1st 2008 to December 31st 2008. The Seventh Six month progress report covered the period January 1st 2009 to June 30th 2009. All these documents have been approved by the Ministry of Water Resources and DFID.

All work on the provincial case studies, G1, G2, G3, L1, L2 and L3 as per the Project Memorandum has now been completed. Conferences were held in Lanzhou and Shenyang at which project completion presentations were made by the provincial experts, counterparts and provincial consultants. Presentations were also made by DFID and the ATL.

For all provincial case studies it can be said:

- All project activities have been completed.
- A Specific Case Study Completion Report has been completed by the Case Study Office and has been approved by the PMB.
- The case study was covered in the Provincial Case Studies Final Report, an overarching assessment of the activities, findings and conclusions of all the provincial case studies. This has also been approved by the Project Management Board (PMB). (Milestone Nr 33).
- Feedback from case study activities are being incorporated into the CCS documents.

Almost all the Extension Period Activities have been completed although these have been affected by the reduction in the level of advisory support owing to the reduction in the value of the Consultancy Contract managed by DFID.

The 4th Annual Review of the Project undertaken in July 2009 by officers of DFID and the Ministry of Water Resources concluded that the project had satisfactorily achieved its targets in almost all aspects. It is recognised that there were some areas of underachievement or non-attainment but these could be related to ambitious targets or targets that are strongly influenced by local need to change which is often not possible in the short term. In particular the Mission acknowledged that project milestones had been attained.

Provincial Case Studies Summation and Completion Conferences related to project activities in Gansu and Liaoning respectively were held in Lanzhou and Shenyang in July 2009. Both these events were well attended and include the screening of project videos for the two provinces.

Representatives of the Ministry of Water Resources and the Department of Water Resources of Liaoning Province presented the progress and current conclusions of the project in two separate sessions at the Yellow River Forum held in Zhengzhou in October 2009.

There has been a continuous production in the reporting period of Central Case Study water resources management related documentation based on the reports and findings of the provincial case studies, the various thematic papers that have been commissioned and international best practice and experience reporting. The documents range from thematic papers, to advisory notes to more detailed manuals.

There are also 'overview' or umbrella documents on IWRM (International Perspective) and Water Demand Management - both are substantially complete.

The CCS documents under preparation as presented below.

IWRM Instrument (After GWP)	Thematic Papers	Advisory Notes	Examples	Manuals
1 – Water resource assessment	5	5	3	0
2 – IWRM	7	10	4	1
3 – Demand management	3	5	0	1
4 – Administrative regulation	3	1	1	0
5 – Economic regulation	3	3	2	1
6 – Social change	2	7	1	0
7 – Conflict resolution	1	1	1	0
8 – Information exchange	1	3	0	0
TOTAL	25	36	12	3

In terms of progress of document preparation from a technical standpoint, this is summarised in terms of the table below.

IWRM Instrument (After GWP)	Planned documents	Finished	Almost Final	Under Preparation
IWRM overview	1	0	1	0
Demand Management overview	1	0	0	1
1 – Water resource assessment	14	7	2	5
2 – IWRM	22	8	8	6
3 – Demand management	9	3	4	2
4 – Administrative regulation	5	0	2	3
5 – Economic regulation	9	4	2	3
6 – Social change	10	6	3	1
7 – Conflict resolution	3	1	2	0
8 – Information exchange	4	0	2	2
TOTAL	78	29	26	23

As was stated in the Seventh Six Month Progress Report:

“In the Sixth Progress Report it was stated that it was “envisaged that the majority of consultancy inputs will have been completed before the end of 2009”. It is also planned that the project will be completed by the end of March 2010. There has been a major change imposed on the project by DFID and it is necessary for the consultancy services to be extended back to the original June 30th 2010 end date. Additionally, the Contract for Consultancy Services has been significantly reduced by DFID, in line with DFID’s requirement for all their aid projects in China to reduce costs in 2009 and 2010. This will impact on the deliverables for the remainder of the project both in terms of project scope and output. The extent of the reduction is of the order of 20% overall but comes in the last year of a 5 year project, hence the scale is considerable.”

The Contract for Consultancy Services has now been modified and the value of the consultancy level has been reduced. This does affect the completion of the project. The completion date of the Project is also now confirmed as being June 30th 2010. The design for the advisory services to complete the project has been modified accordingly.

Despite the above mentioned changes, every effort has been made to finalise the output documentation of the Central Case Study. Without such documentation, the dissemination programme would be severely affected. Many documents have been completed in either English or Chinese depending upon the originator of the material and the process of translation is taking place to yield each document in both languages. It is principally the larger documents on Integrated Water Resources Management (IWRM) and Water (Resources) Demand Management (WDM) that remain to be finalised although these are between 80% and 90% complete. The reduction in the level of consultancy services will also impact on the involvement of the international consultants in the dissemination process.

In order to improve the interaction by the project team and officials in the Ministry of Water Resources the level of national level consultants has been strengthened through the introduction of experts of **Institute of Hydrology & Water Resources**, School of Civil Engineering, Tsinghua University and the **Institute of Science Communication, Beijing**. The organisations have a specific brief to strengthen the Chinese versions of the CCS documentation programme and possibly reformat these to the specific requirements of the Ministry and the audiences the Ministry wish to target with dissemination messages and material.

1 Introduction

1.1 The Progress Report

This report is the **Eighth (8th) Six Month Progress Report** and is considered to relate to the period from June 30th 2009 to December 31st 2009.

The Inception Report contains information related to progress from the start of the Project, taken to be July 1st 2005, to January 2006. The first six month progress report covered the period January 2006 to the end of June 2006. The second six month progress report covered the period July 2006 to the end of January 2007. The third six month progress report covered the period February 1st to June 30th 2007. The fourth six month progress report covered the period July 1st 2007 to December 31st 2007. The fifth six month progress report covered the period January 1st 2008 to June 30th 2008. The sixth six month progress report covered the period July 1st 2008 to December 31st 2008. The seventh six month progress report covered the period January 1st 2009 to June 30th 2009. All these documents have been approved by the Ministry of Water Resources and DFID.

This will be the last Six Monthly Progress Report. Progress and achievements will next be presented in the Project Completion Report that should be prepared in April 2010.

The reporting is based on the Milestones and Gantt Charts included in the Inception Report. In addition in the Inception Report there is presented Project Risks that were based on the information in the Project Memorandum, modified where appropriate together with a further number of project warnings to create additional project management awareness assistance for project personnel.

The Six Monthly Progress reporting process is as defined in the Project Memorandum, the Inception Report and more fully in the Monitoring and Evaluation Implementation Report of June 2006. Additional reference is made to the 2006 Monitoring and Evaluation Report of March 2007 and the 2007 Monitoring and Evaluation Report of March 2008.

The source of the information in this report being:

- Progress presentations made during Project Management Board (PMB) Meetings.
- Training Management Documentation or other related reporting
- Discussions between CPMO and PPMO staff and consultants in both Gansu and Liaoning.
- DFID Annual Review Mission Back-to-Office Report of July 2009.

Since the majority of project activities have been completed and all provincial activities have been drawn to a close at the end of June 2009, the Gantt Charts and Milestone Achievement tables normally included in Six Monthly Progress Reports has not been used in this report. If such information is required, reference should be made to the 7th Six Month Progress Report of July 2009.

The format for the Six Monthly Reporting was approved at Project Management Board Meeting No 2 held in June 2006.

1.2 Key Events and Achievements

1.2.1 Introduction

In summary the key events and achievements over the second half of 2009 have been:

Date	Event / Achievements	Comments
July 2009	DFID 4th Annual Review Mission to Gansu, Liaoning and the WRDMAP Central Case Study in Beijing. (July 21 st to 30 th).	<i>Progress considered acceptable to good. Senior members of the MWR participated in the Review Mission. As reported by DFID: "In general the activities in Gansu have been successfully completed comparing with project design, in particular the milestones." With a similar statement for the completion of activities in Liaoning Province.</i>
July 2009	WRDMAP Gansu Province Case Studies Summation and Completion Conference, Lanzhou, July 22 nd 2009.	<i>The final event was well participated through representatives from 14 municipal water departments, 43 water saving pilot counties, and relevant provincial departments.</i>
July 2009	WRDMAP Liaoning Province Case Studies Summation Completion Conference, Shenyang, July 28 th 2009.	<i>The final event was well attended by the representatives from 14 municipal water departments and in particular from the environmental protection bureaus, and relevant provincial departments.</i>
September 2009	Completion of Climate Change Studies for Gansu and Liaoning pilot river basins.	<i>Workshops and seminars have been undertaken to explain the outcome of the studies. A Final Report on the topic was produced.</i>
September 2009	Project Summary Bulletin July 2009	<i>The project Summary Bulletin was produced and distributed to key stakeholders at the central and provincial levels.</i>
September 2009	Provincial Case Studies Final Report. (Completed). [Financial Milestone Nr 33].	<i>A major project output that summarises all project case study activities in relation to various aspects of IWRM. The document is based on the individual case study reports produced by each provincial case study office but presents more insight and findings that serve as the feedback to the Central Case Study work activities and the documentation programme.</i>
October 16 th 2008	Project Management Board Meeting No12. [Note the meeting was held in the Ministry of Water Resources as	<i>Approval was subsequently given for the attainment of Milestones 21, 33, E3, E5, and E6/E7 on December 1st.</i>

Date	Event / Achievements	Comments
	usual].	
October 18 th to 23 rd	Yellow River Forum, Zhengzhou : Presentation of WRDMAP by Dong Yanfei (CPMO).	<i>The WRDMAP presentation was reasonably well attended although in a small session. Project documentation was made available outside many sessions.</i>
October 27 th	Interview under the DFID China Programme Evaluation Process : The ATL and MWR Project Manager were interviewed separately.	<i>Interviews were thorough and interesting. It is hoped that the success of WRDMAP played a positive impact in the review process.</i>
October	Official DFID Website has details of WRDMAP posted.	http://www.dfid.gov.uk/Where-we-work/Asia-East-- Pacific/China/China-and-water/

1.2.2 Fourth (4th) Annual Review Mission (July 21st to 30th 2009):

Summary:

The mission team consisted of participants from Central Project Management Office, CCSO, two Provincial Project Management Offices (PPMOs), MM and DFID. Senior Representatives from Ministry of Water Resources, Senior Environment Advisor and MDG Sector Head DFID, Deputy Water programme manager participated in part of the mission as well.

The Review Mission, in relation to Gansu Provincial activities reported:

“In general the activities in Gansu have been successfully completed comparing with project design, in particular the milestones.

Some of the achievements identified had been:

- *IWRM tools have been better understood and applied at provincial and county levels to manage its water resources. In particular the Gansu Shiyang River Basin Water Resource Management Regulation drafted by the project team and approved by the provincial People’s Congress, specifies that the regional administrative management to the sections of river basins should be in line with the overall management to the river basin. The cross-sectoral consultation mechanism is being integrated into Shiyang river basin management with modern technologies applied in the process.*
- *The case study activities significantly contributed to the institutional development of Shiyang River Basin Management Bureau which was newly established at the time the project started.*
- *The county level departments and farmers are involved in water saving measures through the set-up of water user associations. The household water right systems and permitting systems have been introduced to WUAs and water management stations and county water bureaus to reduce*

water use while maintain farmer's incomes by better cropping and irrigation practices. The WUAs also empower farmers to manage irrigation water by themselves, more influence and involvement in the matters affecting their daily lives.

- *The study of the impact of climate change on Shiyang river basin was carried out with SRB water resource model applied.*

The mission was impressed with the positive feedback from local professionals and farmers in terms of the conceptual change on water resource management, the application of the innovative approaches in daily water management, the capacity building, and the institutional improvement. Evidence was seen in the following field trips to Wuwei, Jinchang and Minqin through meeting the Shiyang River Management Bureau, visiting the water user associations and talking to relevant staff from water departments. It is believed that the project activities have made tangible contribution to the implementation of Shiyang River Basin Comprehensive Restoration Plan. At the wrap up meeting, the Gansu team expressed strong willingness to contribute to CCS activities in the remaining year, and the idea was welcomed by the mission. Both CPMO and DFID believed that the two provinces should be closely involved in CCS activities.

The Review Mission, in relation to Liaoning Provincial activities reported:

The mission in Liaoning consisted of the attendance of the final summarization and dissemination workshop and the trips to case study areas Chaoyang and Beipiao.

The Review Mission reported that : *“In general the activities in Liaoning have been successfully completed comparing with project design, in particular the milestones”.*

Some of the achievements identified were identified as:

- *“IWRM tools have been better understood and applied at provincial and municipal levels to manage its water resources. Consultation mechanism is being established in Daling river basin. The approach is contributing to the preparation of regional water resource planning and other river basin's planning in Liaoning Province.*
- *Drought Management Plan was approved and implemented in Chaoyang, which shifted from the traditional way of drought 'fighting' to 'preventive measures'.*
- *A close collaboration and data-sharing arrangement between Chaoyang water affairs bureau and environmental protection bureau to support better water quality management in the basin has been established.*
- *Modern technologies and techniques have been applied to regional and local water resource management and capacities of professional have been improved.*
- *Recommendations for tariff reform and water saving in the water supply company and for the role of Water Affairs Bureau as activity/performance regulators for the water supply company have been made.*
- *Daling River Basin Climate Change modelling has been established.*

The Mission was impressed with the feedback from local professionals in terms of the conceptual change on water resource management, the capacity building and the application of IWRM tools and WRDM approach in daily work. In particular it's good to know that the Liaoning Provincial Water Department took the initiatives to disseminate the project approaches and lessons of experience at this

year's Provincial Water Resource Conference. Evidence was seen in the following field trips to Chaoyang and through the meetings with CSOs and talking to relevant staff from water departments. The mission was informed by CS 3 (Beipiao WSC) that the recommendation for tariff reform has been submitted to the local government. However its willingness to take actions for change still seems to be weak, which is quite different with the attitude of the provincial department. At the wrap up meeting, the feedback was the same as the Gansu team, the Liaoning team expressed strong willingness to be continuously involved in CCS activities, the idea was welcomed by the mission. Both CPMO and DFID believed that the two provinces should be closely involved in CCS activities. DFID and the ATL again emphasised that attention should not only be paid to achievements, progress can also be made by drawing lessons from the failures. DFID would coordinate the Climate Change Adaptation Project and promote the exchange between the two projects on the theme."

The Review Mission, in relation to Central Case Study (Beijing MWR) activities reported:

Mission feedback :

"Due to the unfortunate illness of the CCS director and the conflicts of schedule, the CCS review was postponed to 18th August. As the 'stand-in' CCS director Liu Bin, Director of Water Resource Division of Department of Water Resource, was not involved in project activities before he took over the job, the purpose of the meeting mainly focused on exchanging ideas how to accelerate the implementation and carry out the dissemination activities (note some slight correction changes have been made to the preceding text). CCS Director nominated key expert for CCS activities, the expert would liaison the CCSD to make sure the activities contributing to MWR's priorities for water resource management. Dissemination was discussed based on MWR and DFID's perspectives. DFID emphasized that CCS played a key role in ensuring the ownership of project outputs and in laying a foundation for future programs if DFID's resources are available after March 2011, and any successful cooperation has to take all partners' interest and demand into consideration. Positive response has been given by the CCS director. It was agreed that the CPMO would arrange a meeting between the CCS director, the ATL and the key expert as soon as possible for consensus on how to proceed under CCS, and a draft dissemination strategy should be prepared for discussion before the next PMB meeting. A Steering Committee meeting is planned to approve the strategy. It was also agreed that CCS would support the provincial representative and CPMO to make presentations at the forthcoming the 4th International Yellow River Forum. Project publications would be disseminated at that event as well.

The Review Mission, in relation to Central Project Management Office (Beijing MWR) activities reported:

"The overall management mainly undertaken by the CPMO has been good. The team played a key role in coordinating the relevant partners. The TA support is quite important in terms of introducing the international best practices and innovative approaches, and their inputs are well recognized by the PMOs. Given the workload of the CPMO, DFID suggested CPMO strengthening input in communication and recruiting more staff if necessary. DFID strongly suggested CPMO making full use of the advantage of managing other cooperation projects on behalf of the Ministry and strengthening the knowledge and lesson sharing with other relevant projects."

1.2.3 Gansu Province, Final Summation and Dissemination Workshop : Lanzhou

As reported by DFID : *“The final event was well attended by the representatives from 14 municipal water departments, 43 water saving pilot counties and relevant provincial departments. The DFID China Senior Environment Advisor (John Warburton) and Director of MWR International Economic & Technology Exchange Center (Mr Yu Xingjun, Project Steering Committee Member) delivered speech on behalf of their own organisations and made positive comments on the activities conducted in Gansu. The PPMO summarised the achievements of Gansu case studies and each CSO presented in details the implementation of case studies against objectives and milestones, the methodologies, the achievements and the lessons drawn from experiences. The ATL reviewed the project overall objectives, components and approaches promoted by the project, gave an overview to the audience what the project tried to achieve.”*

At the conference a substantial project summary document for Gansu Province activities was disseminated to the audience. In addition, a project video was screened related to activities in the Gansu Province Case Studies.

1.2.4 Liaoning Province, Final Summation and Dissemination Workshop : Shenyang

As reported by DFID : *“The final event was well attended by the representatives from 14 municipal water departments and in particular from the environmental protection bureaus, and relevant provincial departments. DFID China Head of Millennium Development Goals (MDG) Sector (John Leigh) and Project Manager of MWR CPMO (Zhu Jiang) delivered speech on behalf of their own organisations and made positive comments on the activities conducted in Liaoning. The PPMO summarized the achievements of the Liaoning case studies, and each CSO presented in detail the implementation of the particular case study against objectives and milestones, the methodologies, the achievements and the lessons drawn from experiences. The ATL reviewed the project overall objectives, components and approaches promoted by the project, gave an overview to the audience what the project tried to achieve. The ATL presentation also introduced in more details what have been done in Gansu, which made up for the pity that no Gansu representative presented at the event.”*

At the conference a WRDMAP project summary document for Liaoning Province activities was disseminated to the audience. In addition, a project video was screened related to activities in the Liaoning Province Case Studies.

1.2.5 Project Management Board Meeting : PMB 12: (Key points):

The meeting was held in the Ministry of Water Resources.

Main topics discussed were:

- Central Case Study (CCS) organisation, work methodology and programme;
- CCS Dissemination Strategy and Programme
- Project Extension. It was concluded that Project Completion will be June 30th 2010.

- Planned UK Study Tour for CCS related personnel
- Project Film (then under preparation).
- CPMO Work Plan for 2010.

Financial milestone documentation was submitted for the following :

Milestone 21 : IWRM Planning for the Upper Daling River Basin

Milestone 33 : Provincial Case Studies Final Report

Milestone E3 : Water Abstraction Permitting Auditing Process

Milestone E5 : (Combined with the above MS E3) Report on Permitting System, Household Water Rights Certificates (HHWRCs) in the Shiyang River Basin (SRB)

Milestone E6/E7 : Climate Change Report for Shiyang River Basin (SRB) and the Daling River Basin (DRB)

All were recognised as being approved / completed through a notice of December 1st 2009.

The participants at PMB being:

Name	Organisation	Title
Wu Nongdi	Department of International Cooperation, MWR	Division chief
Wu Lin	DFID China	Water Sector Manager
Liu Bin	Department of Water resources, MWR	Case study Director, Division chief
Dong Yanfei	CPMO/ The International Economic & Technical Cooperation and Exchange Centre, MWR	Project Officer
Sun Yan	CPMO/ The International Economic & Technical Cooperation and Exchange Centre, MWR	Project Officer
Wang Zhongjing	Tsinghua University	CCS expert
Zhan Zhengmao	Institute for Science Communication of China	CCS expert
Shu Zhibiao	Institute for Science Communication of China	CCS expert
Zheng Hao	Tsinghua University	CCS expert
Zhang Yongming	Department of Water resources, MWR	CCS
Don Moore (ATL)	Mott MacDonald	Advisory Team Leader
Wang Yue	Mott MacDonald	Management Assistant
Liu Pei	Mott MacDonald	Translator

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1.2.6 Project Summary Report : July 2009.

A Project Summary Report was prepared in A5 format that summarised project activities and achievements from commencement until the end of June 2009 which corresponded to the official end date of project activities at provincial level in Gansu and Liaoning. The layout of the document corresponded to the IWRM management instruments whilst the document also summarised the documentation outputs expected from the Central Case Study.

The document augmented the three WRDMAP Status Bulletins that were prepared in November 2006, November 2007 and November 2008.

1.2.7 General

More detailed descriptions of the progress achieved over the last six months in each particular case study are presented in Chapter 3.

The project has developed a number of websites where up to date project information is available. Project reports and news together with key links to other useful sites can be obtained by visiting these sites.

The sites being:

For the WRDMAP as a whole, in Chinese:

<http://www.wrdmap.org/>

For the WRDMAP as a whole, in English (to be updated in December 2009/January 2010):

<http://www.wrdmap.com/>

Both these sites also have a password protected user area where project documents and information are available, news items are posted and discussion fora exist.

In Gansu, the PPMO has created the website: <http://www.gsmwr.com.cn/wrdmap/>

This is well maintained and carries regular news briefs and photo coverage.

In Liaoning, the PPMO has created the website: <http://www.lnwater.gov.cn>

For record purposes, the **Project Steering Committee** comprises:

Name of Committee member	Ministry of Water Resources
Hui Siyi	Vice Minister
Liu Zhiguang	DICST
Duan Hongdong	Planning Department
Guo Yongsheng	Legislation Department

Name of Committee member	Ministry of Water Resources
Chen Xiaojun	Department of Water Resources
Zheng Tonghan	Financial Department
Li Yuanhua	Rural Water Department
Yu Xingjun	FIMO
Jiang Changquan	Liaoning Department of Water Resources
Wei Baojun	Gansu Department of Water Resources

1.3 Monitoring and Evaluation Reporting

Monitoring and Evaluation reports have been prepared in 2006, 2007 and 2008. These documents being prepared by the CPMO staff with assistance from national and international Monitoring and Evaluation Experts and submitted to D/FID and the PMB in march of the following year.

The Monitoring and Evaluation report for 2009, to be submitted in March 2010 is under preparation.

The content and recommendations of the M&E Report for 2008 were presented in the Seventh Six Month Progress Report, Section 1.3.

However, it is worth repeating the Overall Summary and Recommendations as contained in the Seventh Six Month Progress Report:

*“Overall, the all sources of information indicates that project is achieving most of it’s targets and objectives, particularly in the **Provincial Case Studies**. The water resources management topics are being systematically addressed, studied and recommendations and advice are being derived. In many instances, the extent of activity could perhaps have been greater with the involvement of many more counterpart staff in almost all the project case studies. However, from a project position it is difficult to ‘effect’ (accomplish) this if workloads of the organisations preclude such involvement or if the subject matter to the project activities are not immediately, or currently, seen as totally relevant to their operations.*

Almost all these conclusions provide a good basis for the establishment of the messages for the dissemination programme of the Central Case Study.

*Progress has been achieved by the **Central Case Study** as well through the continued preparation of Thematic Papers on different water resources management topics, both based on studies of Chinese practices and international practices. Additionally, a large number of Advisory Notes, currently about 30 in total, related to different water resources management topics have been prepared and have been translated into Chinese. However, these all need strengthening for them to be fully accepted in terms of the technical Chinese and the needs of the Chinese professional.*

Recommendations:

- *Provision of more training, primarily on technical topics, in the areas of the current provincial case studies;*

- *Undertaking broader dissemination of project material and output in the areas of the current provincial case studies;*
- *The continued involvement of provincial case study consultants and key counterparts to assist in the development of CCS material and in the execution of the IWRM/ WRDM knowledge dissemination programme;*
- *Specific and concerted efforts to ensure the Chinese IWRM/ WRDM Knowledge Documents are of the highest quality and with content and format that will create a demand for the material at the provincial, municipality and county levels.”*

In relation to the ‘recommendation’, there has been a concerted effort in the reporting period (July-December 2009) in addressing the issues of CCS documentation and dissemination process. This has been addressing three of the four bullet points above.

1.4 Extension Activities

1.4.1 Background

A summary of the basis for the Extension of Project activities is presented below.

As indicated earlier (Summary), the Consultancy Contract has been modified and the Technical Consultancy (TC) value has been significantly reduced. This has impacted on the scope and form of the outputs related to all the Extension Activities. These will be discussed separately in relation to each item.

1.4.2 Gansu Case Studies

The basic **Extension Period** activities being covered:

Additional activities:

G1: Guidelines/management measures for SRBMB.

Formulation of **supplementary management guidelines** for the implementation of national and provincial regulation in relation to *Shiyang River Basin Water Resources Management*.

Some Guidelines have been prepared however, the extent of guidance documents has been reduced in the light of the TC Reduction. In particular the ‘*management guideline for surface water transfer from the upper catchment to Minqin*’ has been suspended owing to the cut-back in consultancy advisory services. This guideline was intended for the use of the SRBMB and would relate to the transfer of water from the Xiyang Reservoir, the transfer delivery system currently being under construction. The decision was made on the basis of the fact that the initial work carried out on the subject revealed that there was no intention of changing the current practice whereby the Yellow River Water Transfer would still be managed by the Minqin government system and would not fall under the remit of the SRBMB. It is believed that a common transfer policy where all transfer are dealt with in a co-ordinated manner under the direction of a single ‘transfer management entity’. This could be a joint committee between the SRBMB, Wuwei WAB and Minqin WAB. Any guideline operational

framework would need the consultation with all three parties to produce a single operational guideline. Initial discussions indicated there was insufficient time to undertake such a ‘participatory’ solution. It is recommended that this is explored in more detail by the parties themselves.

G1: Climate change impact assessment

This has been completed and the work contained in the report “**Climate Change Report for Shiyang River Basin (SRB) and the Daling River Basin (DRB)**” - Milestone E6/E7. This is a substantial document and is awaiting a decision of the CPMO as to the dissemination plan.

The reduction in TC activity has only had a minor impact on the work and related to economic analysis elements.

The final presentation seminar was held in the Ministry of Water Resources, See Section 3.2.1 (b).

G1/2/3: Abstraction permit auditing

Implement a process of **abstraction permit auditing and refine management** approaches to support the process and recommend reporting procedures and management responses – to support the mandated new responsibilities of the SRBMB.

This has been completed to the extent possible. It has been combined with item G1 above.

Continuation of Original Project Design Activities:

The continuation of original activities was also to be supported in the Extension Activities, these included:

G2/3: Training consolidation and packaging (covered by FA funded activities).

Little additional training has been undertaken. The FA budget lines for provincial activities have been closed. Special requests are required for specific activities.

G2: Water saving trials in 2008 irrigation season (if works are completed)

Construction of irrigation infrastructure was completed in both Case Study G2A and Case Study G2B. Advice was provided in relation to water saving trials in the 2009 irrigation season. However, the extent of support was curtailed owing to the reduction in TC support level. (See Section 3.4.1).

G1/2/3: Further support to GIS application (to be covered by FA training)

Little additional training has been undertaken. The FA budget lines for provincial activities have been closed. Special requests are required for specific activities.

G3: Support to household water right system/tickets/permitting (covered with minimum inputs).

This has been completed to the extent possible. After several meetings, a report has been prepared and submitted that is linked to the ‘Guidelines/management measures for SRBMB’ and ‘Abstraction permit auditing’ mentioned above.

1.4.3 Liaoning Case Studies

Additional Extension Period activities:

L1: Support to IWRM planning outside Chaoyang district (with local consultants only)

Provide support to stakeholders outside the Chaoyang Municipality in appreciating and understanding of IWRM practices. Provide ‘road shows’ to these areas demonstrating the issues learned for provincial case studies (in Gansu and Liaoning).

This has been completed. It has been managed and undertaken by the Liaoning Water Resources Department through the Liaoning Hydrology and Water Resources Bureau.

L1: Climate change impact assessment

This has been completed and the work contained in the report “**Climate Change Report for Shiyang River Basin (SRB) and the Daling River Basin (DRB)**” - Milestone E6/E7. This is a substantial document and is awaiting a decision of the CPMO as to the dissemination plan.

The reduction in TC activity has only had a minor impact on the work and related to economic analysis elements.

The final presentation seminar was held in the Ministry of Water Resources, See Section 3.2.1 (b).

L1: Review of IWRM planning guidelines

Incorporate **IWRM Planning** and implementation elements into the **Provincial Guidelines** for Water Resources Planning.

This is yet to be completed. The reduction in international TC advisory support level is affecting the situation. However, it is hoped that time can be assigned to undertake the work early in 2010. It is believed that local support will be provided for this activity outside the scope of project budget lines.

Continuation of Original Project Design Activities:

L2: Enhancement of water quality modelling

New data acquisition is complete. Limited consultancy is being provided, but has been more than was anticipated – under the final TC arrangements for the activities in the Extension period no allowances were incorporated for this item). Additional international TC support is required to make full use of the data that has been collected. This input is to address some issues that have arisen.

1.5 Additional Studies based on Savings in Financial Assistance (FA)

1.5.1 Introduction

Based on savings in the FA Budget a number of additional activities and studies were identified by the provincial counterpart organisations for undertaking using these saved monies.

The FA budget lines for provincial activities have been closed at the end of June 2009. Some minor activity has occurred after that date. Special requests are required for specific activities if related to project re-imburement through the FA budget.

Below is summarised the status of such work.

1.5.2 MIS-GIS Data Management System (G1 for SRBMB)

The aim is to prepare a number of data management modules linked to the existing GIS already established in the SRBMB Offices. In addition it is planned that the databases of the four modules would be stored in a single server to enable both retrieval by the ArcGIS and by a data analysis and processing module also to be developed.

The four modules would be:

- Hydrometric and Climate Data Management Module;
- Groundwater data (primarily from the Project 35 groundwater observation wells) Management Module ;
- Water Abstraction Permit Data (to SCD460) Management Module;
- Analysis Module.

By building the SRBMB MIS-GIS system in modules will facilitate the addition of further modules.

Other data management modules that could be built would include:

- Groundwater quality data management;
- Soil water and soil quality data (in terms of salinity) management;
- Agricultural statistics including cropped area, production, yield data etc;

No agreement could be reached on the level of work required not the manner in which such work could be undertaken. There was also an issue of the actual residual value of FA monies that could be made available for this new task.

Not work was NOT undertaken primarily owing to FA funding constraints.

1.5.3 WEAP-Tsinghua (WTM) Development for Minqin (G3)

In the Minqin area, the WTM represents the five main irrigation districts downstream of Hongyashan Reservoir. There are, however, eleven main canals leading from the general main canal that is fed from Hongyashan reservoir. It is possible to refine the surface water network and irrigation system representation of the model (with the use of alignments from satellite imagery or as-built drawings of the irrigation system) to include each of the eleven main canal commands independently. This would have several advantages:

- The spatial distribution of groundwater recharge and of groundwater abstractions would be better represented;
- The spatial distribution of cropping patterns would be better represented;
- The impacts of different water allocation policies for surface and groundwater irrigation would be better represented;
- The improved spatial representation of the irrigation system would be more closely matched with the refined groundwater component that is currently being developed.

This work has been undertaken by the GIS Department of Lanzhou University. The work used the WEAP Modelling Package together with a Modflow groundwater model previously developed by Lanzhou University under a separate research project.

Minimum support by the TC Consultants, both international and national (Beijing based). This was primarily due to the fact that the contractor, Lanzhou University GIS Department, was working directly with the Minqin Water Affairs Bureau.

This work is reportedly complete. However, it is also reported that the Lanzhou University has a term contract with the Minqin Water Affairs Bureau and that continued support and development will take place beyond the completion date of WRDMAP. A report has been prepared and rests with the Minqin Water Affairs Bureau.

1.5.4 Project Film for Project Activities in the Shiyang River Basin

A film has been produced by local film makers recording the activities and outputs of the WRDMAP.

This has been completed and was screened at the “Gansu Province, WRDMAP Final Summation and Dissemination Workshop : Lanzhou” in July 2009.

1.5.5 Expanded Water Quality Model for Daling River plus data collection (L2)

The purpose of collecting additional data within the Daling River Basin was to allow the extension of the water quality model created as a pilot study in the Chaoyang area.

In order to extend the model to other areas of poor water quality within the Daling River Basin it was proposed to repeat the process of the development of the existing water quality model for the L2 pilot areas for other areas of the upper Daling basin (Chaoyang area).

The original intention of this proposal was to widen the water quality study to all streams and water functional zones in the Upper Daling River Basin. The extent to which this may be possible will depend on the quality and amount of the data that has been collected.

Support has been and will be provided by the TC Consultants, both international and national (Beijing based).

The data collection programme is complete.

The water quality modelling work has been developed to a large extent. However there is still believed to be a need for refinement particularly in the manner in which the in-stream reservoir systems are represented in the modelling process. It is hoped to be able to provide some further advice in this context over the coming months when an opportunity arises.

1.5.6 Project Film for Project Activities in the Daling River Basin

A film has been produced by local film makers to record the activities and outputs of the WRDMAP.

This has been completed and was screened at the “Liaoning Province, WRDMAP Final Summation and Dissemination Workshop : Shenyang” in July 2009.

2 Key issues and future priorities

2.1 Key Issues

As stated in the Six Month Progress Report No 1 : “*Counterparts need to maximise on their involvement in the project and to realise the benefits the project can yield in relation to their day to day normal responsibilities*”. This assessment and statement remains valid particularly in the Central Case Study. This has been a situation throughout the duration of the project. It is a vital factor in order to maximise the effectiveness of the project in overall capacity building however, it is believed that perhaps the implied ‘involvement level’ as defined in the Project Memorandum was ambitious.

Many of the ‘Issues’ presented in Section 2.1 of the 2nd Six Month Progress Report still basically apply. This was stated as still being the case in all the subsequent Six Monthly Reports.

Most of the activities in all of the provincial case studies have been completed.

Presented below are some of the areas where it was identified in earlier progress reporting that extra effort was required to ensure effective project delivery. These have all been given attention throughout project activities and are still being addressed. In all cases improvements have been achieved since the issues were first identified early on in the project.

- (a) *Improvement in the level of counterpart ownership and involvement in project activities at provincial level;*
- (b) ***Major improvement in the level of counterpart ownership and involvement in project activities at the central level in the Central Case Study;***
- (c) *Continuous efforts to improve internal communication;*
- (d) *Continuous efforts to involve stakeholders within the information dissemination programme and to at the same time improve communication and co-operation with stakeholders;*
- (e) *Increasing the degree and frequency of interaction between the CCS personnel and provincial case studies;*
- (f) *Increasing the communication and passage of information between the CCS and the Provincial case studies;*
- (g) *A particular focus on the considerations related to WUA establishment and strengthening in groundwater irrigation areas;*
- (h) *Continuation of the links and co-operation with other projects, in particular the World Bank/DFID Pro Poor Rural Water Reform Project.*

A new priorities was identified in the 3rd Six Month Progress Report:

- (i) *Improvements are required in the planning and delivery of training in relation to provincial case studies. Increased focus on identifying training topics that are directly relevant to the case studies.*

It is believed that the feedback from the Annual Review Mission's findings in both Gansu and Liaoning Provinces has demonstrated that counterpart ownership of project activities and output has in fact been good. This has improved throughout the duration of provincial case study activities. (This applies to (a) above.

It is also believed that the level of communication between the CPMO and the provincial level has improved throughout the period of project activities.

2.2 Future Priorities

In the context of item (b) above, a new initiative has been established to improve access to opinions and viewpoints of officials in the Ministry of Water Resources in order to ensure that level of usefulness and acceptability of project output is maximised.

The initiative is the introduction of more national level consultants to help finalise the CCS documents, have significant levels of contact with officials in the Ministry of Water Resources, refining and perhaps reformatting CCS output for other target audiences other than those implied in the Project Memorandum. The additional national level consultants come from:

- Institute of Hydrology & Water Resources, School of Civil Engineering, Tsinghua University
- Institute of Science Communication, China.

This initiative also to some extent will address in part the issues related to (e) and (f) above.

It is believed that this will further address issue (b) - improvement in the level of counterpart ownership and involvement in project activities at the central level in the Central Case Study, which is an essential requirement for the remainder of the project.

3 Case Study Progress

3.1 Introduction

About 99% of provincial case study activity is complete. The focus in the reporting period has been in the continued preparation and finalisation of Central Case Study documentation in Chinese and English. (A Summary Table of all Key Milestones is given in Appendix B).

3.2 Central Case Study : IWRM Documentation Programme and Water Law Promotion Programme

3.2.1 Progress of Activities

The CCS Counterparts that have been assigned to the Project are:

Name	Ministry of Water Resources
Wang Yong	Planning Department
Xiong Xiangyang	Legislation Department
Wang Guoxin	Department of Water Resources
Zhang Hongxing	Department of Water Resources
Liu Yongpan	Department of Water Resources
Zhang Cheng	Financial Department
Dang Ping	Rural Water Department

Departmental permissions have, it is believed, been obtained for the active participation of these counterparts in the Project. The increased level of national consultants in the CCS will facilitate the securing of feedback and opinions on CCS documentation from the counterparts and other key stakeholders in the Ministry and elsewhere. *[It should be noted that the Case Study Director, Mr Wang Guoxin, is now back at work following his serious illness but is still undergoing treatment].*

CCS document material has been identified and most is complete to one level or another (See (a)).

This list of material has been made available to MWR officials for some time and was included in the 7th Progress Report of July 2009.

Although there has been a major reduction in scale of the Consultancy Services over the last year of the Project as a result of financial cutbacks within DFID China, the CCS is endeavouring to produce as much of the identified material as possible. Few documents have been eliminated or reduced in scope.

Both the umbrella documents covering IWRM as a single topic and Water Demand Management as a single topic are almost complete. Some finalisation work will be required in January.

(a) Documentation Programme

There has been a continuous production of Central Case Study water resources management related documentation based on the reports and findings of the provincial case studies, the various thematic papers that have been commissioned and international best practice and experience reporting.

These are summarised below. Most are complete in either Chinese or English, depending upon the originator of the document. In addition, a large majority have already been translated into Chinese (where necessary) and are undergoing peer review. The documentation is listed under the various IWRM Themes, as per Global Water Partnership's classification of water resources management 'tools'. It should be noted that titles of the documents might change and additional documents might be added depending upon the consultation process with project counterparts at the central level. However, the documents listed below are considered to be substantially entire.

In the listing of topics for which documentation has been (or is in the process of being) produced:

- TP : Thematic Paper (normally about 20 to 30 pages)
- AN: Advisory Note (normally about 20 pages)
- EX : Example (generally to support Advisory Note) (normally about 20 pages)
- MA : Manual – A detailed practice guide often related to an Example.

The overview or umbrella documents on IWRM International Perspective and Water Demand Management are both about 150 pages long.

The CCS documents under preparation as presented below.

IWRM Instrument (After GWP)	Thematic Papers	Advisory Notes	Examples	Manuals
1 – Water resource assessment	5	5 (7)	3	0
2 – IWRM	7	10	4	1
3 – Demand management	3	5	0	1
4 – Administrative regulation	3	1	1	0
5 – Economic regulation	3	3	2	1
6 – Social change	2	7 (8)	1	0
7 – Conflict resolution	1	1	1	0
8 – Information exchange	1	3	0	0
TOTAL	25	36 (38)	12	3

Note: Total in brackets included titles now abandoned owing to TC reduction.

In terms of progress of document preparation from a technical standpoint,, this is summarised in terms of the table below.

IWRM Instrument (After GWP)	Planned documents	Finished	Almost Final	Under Preparation
IWRM overview	1	0	1	0
Demand Management overview	1	0	0	1
1 – Water resource assessment	14	7	2	5
2 – IWRM	22	8	8	6
3 – Demand management	9	3	4	2

IWRM Instrument (After GWP)	Planned documents	Finished	Almost Final	Under Preparation
4 – Administrative regulation	5	0	2	3
5 – Economic regulation	9	4	2	3
6 – Social change	10	6	3	1
7 – Conflict resolution	3	1	2	0
8 – Information exchange	4	0	2	2
TOTAL	78	29	26	23

In terms of translation, the following table summarise project progress.

	Planned documents	Translation complete or almost complete	Translation of final EN started	Translation of final EN Not started
IWRM overview	1			1
Demand Management overview	1			1
1 – Water resource assessment	14	11	3	0
2 – IWRM	22	7	5	10
3 – Demand management	9	8	1	0
4 – Administrative regulation	5	0	2	3
5 – Economic regulation	9	6	0	3
6 – Social change	10	7	0	3
7 – Conflict resolution	3	0	1	2
8 – Information exchange	4	2	0	2
TOTAL	78	41	12	25

In addition to the above, some of the major reports prepared during the course of the project will be re-worked/reformatted and reprinted in 'Final Form'.

A final report has been prepared on the Climate Change Studies undertaken for the Shiyang River Basin and the Daling River Basin.

A full list of CCS Documents as they currently stand is presented in **Appendix A**.

(b) Seminars

The main seminar undertaken in the reporting period has been related to the Climate Change Studies.

Seminar: Climate Change Studies

The Climate Change Seminar related to the Extension Period Activities reported in Section 1.4.2 Case Study G1 for Gansu and Section 1.4.3 Case Study L1 for Liaoning. [Note, earlier workshops had been held in relation to the approach and methodology for undertaking climate change studies].

The content of the feedback Seminar being:

- Introduction & purpose of workshop
 - Scope of climate change studies

- Participants in the studies
- Aims of the workshop
- Water resources assessment in the SRB under the influence of climate change
- Appropriate adaptations in the SRB
- Hydrological assessments in the DRB
- Appropriate adaptations in the DRB
- Areas of uncertainty
- Limitations of climate modelling used and future directions / improvements
- Uncertainties in crop modelling and future directions / improvements
- Possible adaptations in agriculture
- Uncertainties in modelling hydrological response to future climate change
- Discussion
 - How will results of study be used ?
 - Which results do we have most confidence in ?
 - Are there no regrets paths to follow ?
 - Where is more science required ?
 - How much is known about existing flood risk and should future flood risk be a significant concern ?

Those attending the Seminar held in the Ministry of Water Resources were:

Name	Unit	Position
Zhang Yongming	MWR, Water Resources Dept	Deputy Division Chief
Liu Shaobin	Water Resources Department of Gansu Province	Project Manager, Liaoning
Xiong wei	CAAS (Consultant)	Research Associate
Wang Guangsheng	MWR, Groundwater Monitoring Center	Chief engineer
Yang Jianqing	MWR, hydrology bureau	Deputy Chief
Wang Guoqing	Nanjing Hydraulic Research Institute, Climate Center	Chief Engineer
Zhang Guangjin	MWR, Planning Dept.	Officer
Sun Shihua	Liaoning Hydrology Bureau	Deputy Chief Engineer

	Province	
Luo Jianfang	Water Resources Department of Liaoning Province	Section Chief
Gao Zhanyi	International Network on Erosion and Sedimentation	Deputy director
Xiong Xiangyang	MWR, Legislation Department	Division Chief
Xu Yinlong	CAAS, IEDA	Researcher
Yang Yonghui	CAS, Center for Water Resources Research	Researcher
Pan Xuebiao	China Agricultural University, Environment Dept.	Professor

The Seminar presented the results of the Climate Change Studies and concentrated on the uncertainties in the process of climate change studies and the care required in developing and implementation adaptation measures.

Fewer seminars have taken place than was originally envisaged owing to the availability of counterparts to participate.

However, the focus of the period has been on the continued preparation of the CCS documentation.

Seminars are planned for 2010 based on the Dissemination Strategy prepared by the CCS with the assistance of Tsinghua University and linked organisations.

(c) Water Law Promotion Programme

Progress over the last six months has again been focussed on the preparation of a '**WRDMAP WLPP Status Report**' that summarises all project provincial and central level legislation related activity and provides recommendations for improvements. This is now almost complete.

(d) Communication and Capacity Building

A CCS / WRDMAP Dissemination Strategy Document has been prepared.

Additionally, a series of new workshops and conferences are planned. These include further activity in Gansu and Liaoning Provinces as well as Henan Province (Zhengzhou) and Hebei Province.

3.2.2 Achievement of Milestones:

Milestone 33, '**Provincial Case Studies Final Report**' was completed in the reporting period.

This report complements the seven Provincial Case Study Reports for the separate case studies undertaken in Gansu Province and Liaoning Province in the Shiyang River Basin and the Daling River Basin respectively. These reports were prepared in late 2008 and approved by DFID (the donor) and the Ministry of Water Resources in March 2009. The Report draws on these individual case study reports and detailed output technical reports to bring together lessons learned through the provincial case studies and draw out conclusions which will have a wider validity and applicability. This providing information for the Central Case Study (within the Ministry of Water Resources, Beijing) and for the provincial water resources departments to continue the interventions and changes instigated by the project.

The report attempts to emphasise the achievements and difficulties in moving towards a system of integrated water resources management (IWRM) in its broader philosophical sense. Within the context of IWRM, the Project has had a focus on water resources demand management (WRDM) and the improved management of scarce water resources. The project has had a focus on capacity building and investigating the means of achieving change, and identifying potential impediments to change, in water resources management.

Milestone 36 : Operational Manuals and Advisory Notes – Over 60 have been prepared in draft. These are going through a process equivalent to a review by counterparts and the process is being aided by experts from Tsinghua University and the Institute of Science Communication. It is probable that this milestone has effectively been achieved however, final printing of a number of the documents would be better evidence of achievement.

It should be noted that Milestones 34 and 35, undertaking six workshops related to IWRM and six related to IWRM and WRDM will probably not be achieved as was originally intended owing to funding constraints and other factors.

3.2.3 Changes in the risks associated with Milestones

No major changes of note.

The level of counterpart staff available for working in CCS or just reviewing material produced by the CCS had been extremely limited over the initial part of the reporting period. Ministry staff are all very busy and Mr Wang Guoxin is now only working part time.

The issue of counterpart involvement has been addressed through the new involvement of representatives from the Institute of Hydrology & Water Resources, School of Civil Engineering, Tsinghua University and the Institute of Science Communication, China. They will undertake reviews of CCS material as well as elicit the opinions of the Ministry of Water Resources. The individuals from these two organisations have direct links with the required decision makers within the Ministry.

3.3 Gansu Case Study G1 : IWRM Planning in the Shiyang River Basin

3.3.1 Progress of Activities

All project activities have been completed.

A Specific Case Study Completion Report has been completed by the Case Study Office and has been approved by the PMB.

The case study was covered in the Provincial Case Studies Final Report, an overarching assessment of the activities, findings and conclusions of all the provincial case studies. This has also been approved by the Project Management Board (PMB). (Milestone Nr 33).

Feedback from case study activities are being incorporated into the CCS documents.

It is believed that the finalised **IWRM Plan** is awaiting official approval as a plan to be implemented.

No Gantt Chart is included in this report. If a full listing of activities and their execution is required, reference should be made to the 7th Six Monthly Progress Report.

A final report on the **Water Resources Modelling in the Shiyang River Basin** has been prepared. This pulls together and summarises the modelling work and associated assessments carried out in the river basin under project activities over the last 4 years.

[Note the film documentary on WRDMAP Activities in the Shiyang River Basin has been completed and screened whilst all the climate change modelling work and adaptation assessments have been completed and reported on (this was mentioned earlier but might be expected to be covered here)].

Some of the activities not carried out are listed below:

- Final institution review of the SRBMB – Not believed to be necessary and not undertaken owing to the cut back in consultancy services.

3.3.2 Achievement of Milestones

All Milestones have been approved.

3.3.3 Changes in the risks associated with Milestones

No change to note.

3.4 Gansu Case Study G2 : Water Saving Society in Jinchang and Wuwei

3.4.1 Progress of Activities

The content of G2A and G2B is largely similar, and many activities had common elements.

All project activities have been completed.

A Specific Case Study Completion Report has been completed by the Case Study Office and has been approved by the PMB.

The case study was covered in the Provincial Case Studies Final Report, an overarching assessment of the activities, findings and conclusions of all the provincial case studies. This has also been approved by the Project Management Board (PMB). (Milestone Nr 33).

Feedback from case study activities are being incorporated into the CCS documents.

No Gantt Chart is included in this report. If a full listing of activities and their execution is required, reference should be made to the 7th Six Monthly Progress Report.

The main area where progress (or achievements) has perhaps not been as good as had been envisaged is in relation to establishing improved water saving approaches in case studies G2A and G2B as a result of the infrastructure development works that have been financed by the project and local funds. Although the works are of a reasonably high standard and will no doubt improve overall irrigation management, their contribution to 'water saving' as such can only be truly be related to a reduction in seepage from the respective canal systems. Involvement in the support of 'water saving' by the consultants has been affected by both the reduction in the TC budget and also to the fact that since the FA Budget was closed at the provincial case study level, visiting the case study areas is more problematic.

3.4.2 Achievement of Milestones

All Milestones have been approved.

3.4.3 Changes in the risks associated with Milestones

No major changes to note.

3.5 Gansu Case Study G3 : Improved Water Management in Minqin County

3.5.1 Progress of Activities

All project activities have been completed.

A Specific Case Study Completion Report has been completed by the Case Study Office and has been approved by the PMB.

The case study was covered in the Provincial Case Studies Final Report, an overarching assessment of the activities, findings and conclusions of all the provincial case studies. This has also been approved by the Project Management Board (PMB). (Milestone Nr 33).

Feedback from case study activities are being incorporated into the CCS documents.

No Gantt Chart is included in this report. If a full listing of activities and their execution is required, reference should be made to the 7th Six Monthly Progress Report.

The main areas where output has been limited has been in the involvement of the main project team in the work that has been carried out by Lanzhou University on the development of a specific GIS driven modelling system to facilitate water management in Minqin county that was to incorporate a strong conjunctive use component. This is an element of the works being undertaken based on some of the 'saved' funds in the FA Budget. The work has been undertaken in the university in Lanzhou making liaison with the project team based in Beijing difficult especially with the limited consultancy levels remaining. The work however, was undertaken in the knowledge of this factor.

3.5.2 Achievement of Milestones

All Milestones have been approved.

3.5.3 Changes in the risks associated with Milestones

No major changes to note.

3.6 Liaoning Case Study L1 : IWRM Planning in the Upper Daling Basin

3.6.1 Progress of Activities

All project activities have been completed.

A Specific Case Study Completion Report has been completed by the Case Study Office and has been approved by the PMB.

The case study was covered in the Provincial Case Studies Final Report, an overarching assessment of the activities, findings and conclusions of all the provincial case studies. This has also been approved by the Project Management Board (PMB). (Milestone Nr 33).

Feedback from case study activities are being incorporated into the CCS documents.

No Gantt Chart is included in this report. If a full listing of activities and their execution is required, reference should be made to the 7th Six Monthly Progress Report.

The main areas where output has been limited have been in:

- IWRM Planning in the area of financial and economic analysis. Insufficient consultancy inputs were available whilst the costing data was difficult to obtain to the level required for proper analysis.
- Preparation of a Final Report on the Water Resources Modelling in the Daling River Basin. (This will be addressed in January 2010).

The main activity has been the undertaking of the IWRM Planning for the whole Daling River Basin as part of the extension activities.

3.6.2 Achievement of Milestones

All Milestones have been approved.

3.6.3 Changes in the risks associated with Milestones

No changes to note. The IWRM Plan was completed later than originally envisaged. However, the original plan date was unrealistic.

3.7 Liaoning Case Study L2 : Joint Abstraction and Discharge Permit Management in Chaoyang Municipality

3.7.1 Progress of Activities

All project activities have been completed.

A Specific Case Study Completion Report has been completed by the Case Study Office and has been approved by the PMB.

The case study was covered in the Provincial Case Studies Final Report, an overarching assessment of the activities, findings and conclusions of all the provincial case studies. This has also been approved by the Project Management Board (PMB). (Milestone Nr 33).

Feedback from case study activities are being incorporated into the CCS documents.

No Gantt Chart is included in this report. If a full listing of activities and their execution is required, reference should be made to the 7th Six Monthly Progress Report.

The main areas where progress has been limited have been in relation to full use of the water quality data collected as part of the 'Additional Studies' based on FA savings. More modelling expert support is required to review the data and resolve the modelling results being obtained.

3.7.2 Achievement of Milestones

All Milestones have been approved.

3.7.3 Changes in the risks associated with Milestones

No changes to note except that the Project activities have been impacted by the lack of an effluent discharge permitting process within the Environmental Protection Bureau (EPB) in Chaoyang. (This is not an uncommon situation in EPBs across the country).

There is still concern whether the co-operation that has been achieved between Chaoyang WAB and EPB will continue after the end of the WRDMAP.

3.8 Liaoning Case Study L3 : Tariff Design and Water Saving in Beipiao WSC

3.8.1 Progress of Activities

All project activities have been completed.

A Specific Case Study Completion Report has been completed by the Case Study Office and has been approved by the PMB.

The case study was covered in the Provincial Case Studies Final Report, an overarching assessment of the activities, findings and conclusions of all the provincial case studies. This has also been approved by the Project Management Board (PMB). (Milestone Nr 33).

Feedback from case study activities are being incorporated into the CCS documents.

No Gantt Chart is included in this report. If a full listing of activities and their execution is required, reference should be made to the 7th Six Monthly Progress Report.

There are no Extension Activities for Case Study L3.

3.8.2 Achievement of Milestones

The penultimate Milestone for Case Study L3 is **Milestone 25**: “Implementation of water saving plan by WSC. Production of a water saving plan through stakeholder consultation. Issuance of the plan to operational offices and planning organisations. Public announcement of the measures.”

This has not been achieved as such.

However, during discussions with the WSC the need for a specific Water Savings Plan was discussed. This would in fact be compliant with not only the project requirements but also the basic concept for the development of a Water Saving Society. Municipalities are tasked with the preparation and implementation of a Water Saving Plan and such a place should be supported by plans by the WSCs within the jurisdiction of a Municipality. There is an **‘Implementation Plan for Building a Water Saving Society in Chaoyang Municipality’** under a leading Group that includes Mr Ma Guotai, Beipiao County Magistrate.

3.8.3 Changes in the risks associated with Milestones

No changes to note.

The risks identified in the Inception Report became ‘real’, that is the lack of interest of the management of the WSC in the project activities and in particular any changes in operational practices that the project was tasked with achieving.

4 Knowledge Attitude Practice (KAP) Surveys

The approach to the Knowledge Attitude Practice (KAP) Surveys has been designed and is being implemented. (*Outlines of the approach can be found in the Monitoring and Evaluation Implementation Report, dated June 2006*).

A KAP survey for 2009 is currently being undertaken in December 2009 and January 2010 to provide material for the March 2010 Monitoring and Evaluation Report (2009).

It is recommended that KAP surveys cover:

- (a) Counterparts involved in the Provincial Case Studies;
- (b) Government personnel in the offices that have been carrying out the main tasks in the provincial case studies but who have not been involved in the project activities;
- (c) Local consultants involved in the project;
- (d) Provincial PPMO officials.

There will be one basic set of questions common to all.

5 Training

5.1 Training Management System

A summary of the training courses undertaken in the past six months is presented in the Table 5.1.

5.2 Training in the CCS

For any future training, this is likely to take place in the CCS and MWR offices.

5.3 Training Gansu

With the closure of the FA Budget for provincial activities no project related training has been undertaken. However, it is believed that use is being made of the WRDMAP Training Facilities established in the Shiyang River Basin Management Bureau.

5.4 Training Liaoning

With the closure of the FA Budget for provincial activities no project related training has been undertaken. However, it is believed that use is being made of the WRDMAP Training Facilities established in the Chaoyang Water Affairs Bureau.

5.5 Overseas Study Tours

No overseas study tour took place in the reporting period.

One overseas study tour is being planned related to CCS and CPMO counterparts.

Water resources Demand and Management Assistance Project**Table 5.1****Training Summary**

Date	Training	Location	Presentation	PowerPoint?
16/07/2009	Climate change impact and analysis methods	Shenyang, Liaoning	Dr R Wardlaw	Yes
16-17/07/2009	Best practices on the joint abstraction and discharge permit management	Shenyang, Liaoning	Guo Dongming	
04/08/2009	Guideline for Liaoning River Basin IWRM Planning	Shenyang, Liaoning	Guo Dongming	

6 Workshops and Seminars

There have been a number of workshops and seminars over the last six months. Most of these have very useful power-point presentations that can be used by Project Staff for future dissemination.

A list of Workshops is given on the next page in Table 6.1.

7 Reports produced

Numerous reports have been produced since the start of the project. These are listed on the next page in Table 7.1.

Some of the reports are subject matter related and some related to the overall activities on each separate provincial case study.

Reports are generally produced in both Chinese and English although some only exist in Chinese with English summaries.

Reports are printed by the CPMO and the PPMOs and distributed as considered necessary and appropriate. The CPMO and PPMOs keep a record of the distribution process.

The report preparation and distribution management system is being managed by the Communication Officer of the CPMO.

**Water resources Demand and Management Assistance Project
Lists of Reports**

Table 7.1

Nr	Title	Originator/Author (Lead of the team reporting)	Date	Chinese	English	Distributed to
CPMO/CCS						
1	WRDMAP Project Summary Overview	CPMO	Oct/09	Yes	Yes	DFID, Gansu, Liaoning
2	WRDMAP Climate Change Study Report	Robin Wardlaw et al	Sep/09	Yes	Yes	DFID, CPMO
3	CCS Documentation Programme (see Appendix A for ticked items in the columns - 30 Nr Documents Complete)	CCS Team	Dec/09	Yes	Yes	CCSO
Gansu PPMO						
1	Provincial Case Studies Completion Report (revised)	Liu Zongping, et al	Jul/09	Yes	Yes	CPMO, WAB at the provincial and county level
Liaoning PPMO						
1	Speech at the 4th International Yellow River Forum: "The Use of IWRM Methods to Carry Out Water Demand Management as a Basic Approach to Solve Water Problems" - Experience and Inspiration from Liaoning Case Studies, WRDMAP	Guo Dongming	Oct/09	Yes	Yes	Organization Committee
2	Speech at the Annual Workshop Held by the Water Resources Professional Committee of China Water Resources Association in 2009: "Study on Drought Management Methods"	Guo Dongming	Nov/09	Yes	Yes	Organization Committee

8 Co-ordination with other Programmes and Projects

8.1 Introduction

Contact and cooperation takes place with several projects with similar development elements to those of WRDMAP. These projects and programmes are in various stages of development and cover different aspects of the WRDMAP.

A summary of parallel projects and programmes has been presented in earlier Six Monthly Reports. Reference should be made to the 7th Six Monthly Report for a description of these.

Below is presented a brief summary of the activities related to the programmes in the reporting period.

8.2 Donors Round Table for the Water Sector

Since the departure of Susanna Smets (DFID), contact with the Group has been weakened. It is hoped this may be re-established with the arrival of the new DFID Officer Ms Wu Lin.

No activity to report.

8.3 Pro-Poor Rural Water Reform Project (PPRWRP, Work Bank - DFID)

Project now believed to be complete.

One WRDMAP Team Member, Dr George Radosevich has been involved in a project review on behalf of the World Bank.

8.4 (China) Watershed Management Project (CWMP, World Bank - DFID)

Project now believed to be Complete.

8.5 Water and Entitlements and Trading Project (WETS, AusAid)

The project has completed Phase 2 and its project completion report has been made available to WRDMAP. There is useful information on water rights systems and environmental flows.

New project is about to start with a focus on Environmental Flows.

Potential links to the Shiyang River Basin Management Bureau is still unclear.

8.6 River Basin Management Project (RBMP, EU)

The Project is in its 3rd Year and is executed through the MWR and MEP as well as the Yellow River and Yangtze River Basin Commissions. The Project is based on transferring knowledge and research related to the development of the EU Water Framework Directive to Chinese situations through European organisations. It has a strong element that supports research linkages between EU country institutes and research bodies in China. In addition, links have been established between the two Chinese river basins and river basin organisations in Europe, primarily those of the Rhine and the Danube

In the Yellow River Basin Component of the Project the main areas being addressed include:

- Yellow River IRBM action framework;
- Yellow river climate change policy and strategy;
- Institutional strengthening for pollution control. (Includes water pollution control planning, early warning systems for pollution incidents, promotion of investments in clean technology (focus on major industrial units) and water quality monitoring with a focus on bio-monitoring of surface waters).

In the Yangtze River Basin Component of the Project the main areas being addressed include:

- Yangtze River Basin Master Plan (following elements of the WFD);
- Chi Shhui River Basin IWRM Planning (focus on ecosystem threat of hydropower development);
- Changjiang and Pearl River Watershed Rehabilitation Project (supporting a major World Bank funded project) [This component has included the preparation of manuals on watershed rehabilitation. However, the topic has little overlap with documents being prepared under WRDMAP].

Regular discussion takes place between the ATL and the Deputy Team Leader on the Project. This enables both parties to understand the progress of each project and the potential for information exchange to avoid overlap. To date there have been few overlaps whilst the focus areas of project activities are different.

The EU Project has prepared translations and useful explanatory material on:

- **‘An Introduction to the EU Water Framework Directive (WFD)’** (Prepared by Martin Griffiths who is in fact one of the consultants named in the WRDMAP Team). A companion larger translation of the whole WFD plus supporting explanation has also been produced;
- **‘Guidebook on the EU Groundwater Directive’**. This is a production of the MWR with support from the EU River Basin Management Programme. The handbook provides a summary of the approach to groundwater protection and management in Europe that supports the EU WFD.

WRDMAP have provided the EU Project with a list of the CCS Documentation material being prepared. The EU Project has shown keen interest in receiving copies of this material when approved by the MWR and DFID.

The ATL met some of the EU RBMP Team at the Yellow River Forum (see 8.12).

CPMO personnel are also regularly involved in the management of the EU RBMP.

8.7 AAA Programme (World Bank)

No direct contact has been made with the World Bank in relation to supporting the AAA over the last six months. WRDMAP keep abreast of material that is posted on the AAA pages of the World Bank Website. Where relevant, the material is being referred to from within the WRDMAP CCS Documentation Material.

8.8 Global Water Programme (China) (GWP)

No contact has been made with the GWP over the last six months. MWR approved output from the CCS is required before meaningful contact can be made.

8.9 World Wildlife Fund, China (WWF)

No contact in the last six months.

8.10 GEF Hai Basin Project (World Bank)

Project basically almost complete.

8.11 Australia China Environment Development Partnership (ACEDP)

ACEDP has core partners as NDRC, MWR, MEP and SFA (Forestry).

This new programme incorporates the follow on work from the WETS project, See 8.5 above.

The programme contains a number of specialised initiatives and relies on the exchange of expertise knowledge between Australia and China. Some of the Core Projects being:

- (a) Water Ecology Compensation (Payment for Environmental Services);
- (b) Trans – jurisdictional water pollution management;
- (c) Public participation in social and environmental impact assessment (EIA);
- (d) River Health and Environmental Flows in China (follow on from the WETS work. Main activity likely to start in February 2010;

- (e) Improving water efficiency through better irrigation system management (likely to be the largest of the ACEDP Core Projects);
- (f) Social impact and gender mainstreaming package;
- (g) Wetlands policy guidelines and capacity building
- (h) Inland river basins : Managing threats to sustainable water resources development (potential link to the SRBMB) [scope primarily a visit programme but could build on WRDMAP work – as yet no known decision has been made by ACEDP).

In addition there are several policy level initiatives being developed related primarily to climate change. However, there are others related to drought management and general water sector policy.

Many of the above studies are in fact quite small but none the less of interest to WRDMAP. These being primarily (a), (c), (d), (f) and (h).

The ATL has attended meetings held by ACEDP.

CPMO personnel are also regularly involved in the management of the ACEDP Programme.

8.12 River Basin Water Resources Allocation and Management Policy, ADB

A project recently started is a year long project to establish policy guidelines at the national level for the major river basins in the country. The MWR is the executing agency.

From the Project ADB Terms of Reference:

“The primary objective of a water allocation system is to maximize the benefits (social, environmental, and economic) of water to society. This will be achieved by (i) distributing water equitably among regions and users, and setting priorities during water scarcity; (ii) establishing rules for sharing limited water resources and maintaining environmental quality for sustainable development; (iii) protecting the long-term reliability of the resource from over-exploitation; and (iv) adapting to changes in local conditions by accommodating new users while protecting existing users.”

There will be several aspects of the study that will be of interest to WRDMAP. In particular, although the focus of the project is for water allocation policy in the major river basins, in particular the development of allocation principles for the allocation of water between provinces, the considerations will need to encompass how allocation is then practices at lower levels and whether the allocation between sectors is workable at all administrative levels.

8.13 Adapting to Climate Change, DFID.

The project aims to improve international knowledge on the assessment of climate impacts and risks, and develop practical approaches to climate change adaptation, by helping China integrate climate adaptation into the development process to reduce its vulnerability to climate change, and by sharing this experience with other countries.

The project will run for three years from May 2009 to May 2012. The project will be funded by contributions from DFID China, DFID Research and DECC. The lead Chinese partner will be China's NDRC.

The project has been developed as a result of the Department for International Development (DFID)'s ongoing work with China's lead ministry, the National Development and Reform Commission (NDRC) on climate change and development, and previous work commissioned by the Department for Environment, Food and Rural Affairs (DEFRA) (now transferred to the new Department for Energy and Climate Change, DECC) and DFID, in partnership with the Chinese Ministry of Science and Technology (MOST). The project will contribute to China's ability to research and understand the risks and impacts of climate change, develop appropriate adaptation options, and mainstream these into national and regional planning and management.

In support of the overall project goal and project purpose, the five envisaged project outputs are :

- Improved development of, and access to, climate change science in China;
- Comprehensive risk assessments in selected sectors, based upon vulnerability and impacts, produced at national and provincial level;
- Climate risks integrated into planning and management within the three project provinces, and informing national level processes;
- Increased awareness and capacity among Chinese policymakers and other key stakeholders to address climate change adaptation within China's development process;
- Knowledge sharing between China, UK, and other countries in Asia and Africa, to further develop climate change adaptation approaches, and better understand the political economy of adaptation to climate change.

The project commenced during the reporting period (September 2009).

The project will then conduct detailed vulnerability assessments, covering biophysical and social dimensions including gender, within the three project provinces:

- Ningxia Hui Autonomous Region: Agriculture; water.
- Guangdong: Extreme weather events (i.e. flooding and disaster risk reduction); health.
- Heilongjiang: Agriculture; water.

8.14 Conferences

Fourth (4th) International Yellow River Forum (IYRF) 'Ecological Civilisation and River Ethics'.

This took place October 19th~23rd, 2009 in Zhengzhou, Henan Province.

A presentation was made at the Conference by Mr Dong Yanfei on : ***WRDMAP Progress and Achievements***.

A presentation was also made in a separate session by Mr Guo Dongming from the Liaoning Water Resources and Hydrology Bureau where the ***WRDMAP Achievements in Liaoning Province*** were presented.

WRDMAP Project Material including the 2009 Project Summary Bulletin was disseminated at the Conference.

Project personnel, Dong Yanfei, Sun Yan and the ATL attended this conference. Also present were Wu Lin (DFID) and Mr Yu Xingjun from FIMO. Several other personnel from the counterpart and local consultants' team were also present.

Adapting to Climate Change, DFID. Launch. 24th to 25th of September 2009.

The project aims are presented above in Section 8.13.

The ATL attended the Project Launch Conference.

Many of the key team members were present and good contacts were made. Many of the presentations were useful illustrating the progress made in the UK on climate change considerations.

9 Management, Staffing and Administration

9.1 Overall Project Management

The CPMO has effectively dealt with the reduction and then cessation of activities at the provincial level. This has been effected both in relation to the organisation of 'Final Conferences' in the two provinces of Gansu and Liaoning but also in relation to the FA management (see later).

Some of the achievements and related ongoing activities in the reporting period have been:

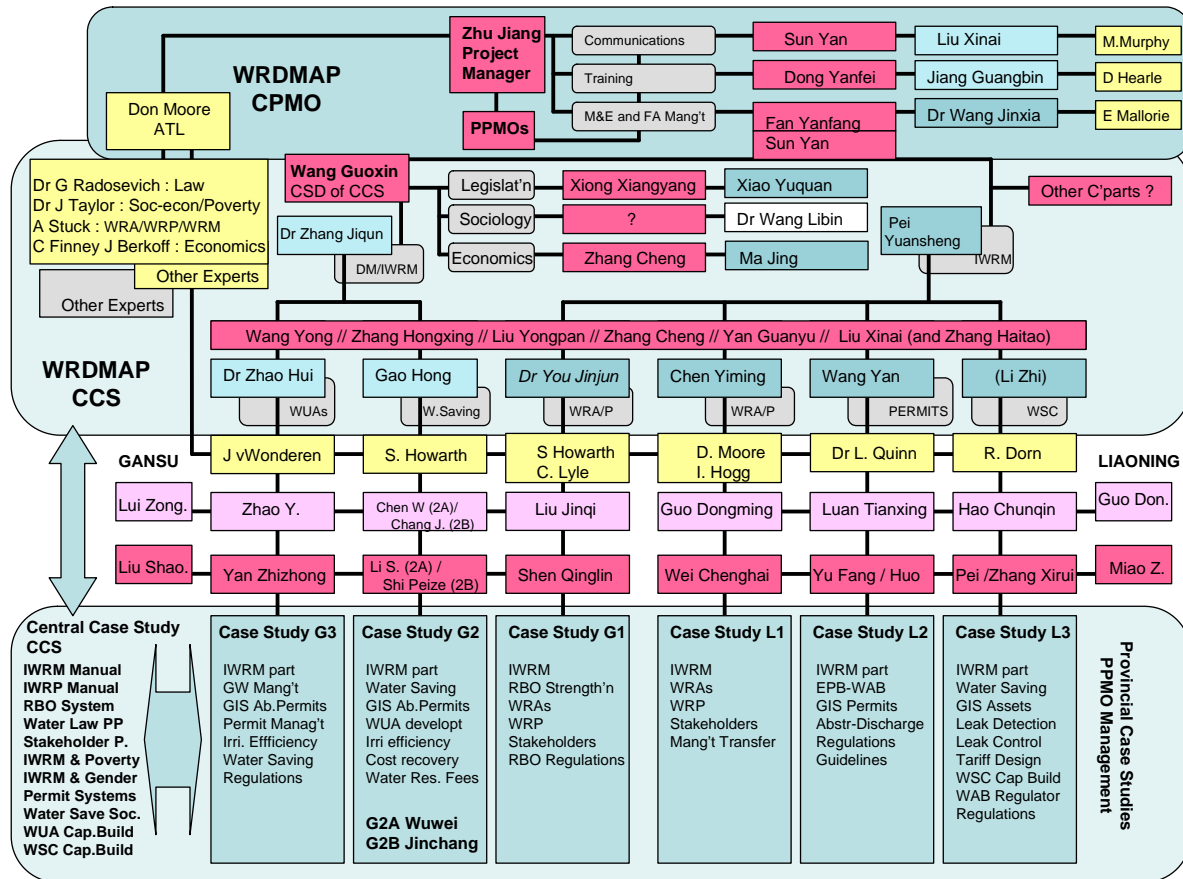
- Organised and participated in : Fourth Annual Review Mission (see Section 1.2.2);
- Helped organise : Gansu WRDMAP Summation and Completion Conference, Lanzhou (see 1.2.3);
- Helped organise : Liaoning WRDMAP Summation and Completion Conference, Shenyang (see 1.2.4);
- Organised Project Management Board meeting Nr 12 (see 1.2.5);
- Produced 2009 Project Summary Bulletin;
- Presented WRDMAP Experience at the Yellow River Forum Conference in Zhengzhou.
- Started to prepare 2010 Project Calendar.

Other normal activities included:

- Overall management of the FA Budget;
- Management of the International Consultants;
- Approved and arranged the printing of numerous project reports – improved the distribution of the reports;
- Organised planning for surveys associated with the 2009 Monitoring and Evaluation Report (in January 2010).

Up until the end of June 2009, project organisational structure is summarised in Figure 9.1. Although provincial activities are now complete, the structure indicates the potential linkages that continue to exist in relation to obtaining supporting information to service the Central Case Study.

Figure 9.1: WRDMAP Organisational and Key Staffing Chart Summary



Counterparts now assigned to the Central Case Study being:

Name	Ministry of Water Resources
Wang Yong	Planning Department
Xiong Xiangyang	Legislation Department
Wang Guoxin	Department of Water Resources
Zhang Hongxing	Department of Water Resources
Liu Yongpan	Department of Water Resources
Zhang Cheng	Financial Department
Dang Ping	Rural Water Department

9.2 Consultancy Component (TC)

9.2.1 Overall Consultancy

As stated in the 3rd Six Month Progress Report (January to June 2007):

“The Main Consultancy Agreement is in place with Mott MacDonald Ltd. Sub-consultancy contracts are in place with HTSPE (UK), DHI (Denmark), IWHR (Beijing), Xinhua IECCO (Beijing), CIAD (Beijing), Gansu Hydrological and Water Resources Bureau and the Liaoning Hydrological and Water Resources Bureau.”

Any staff changes are intimated to the CPMO and DFID as and when they occur.

Overall, consultancy inputs in the project are under control. The provincial consultants have made considerable efforts to manage their staffing inputs without adversely affecting the project outputs. This has in part resulted in some inputs not being invoiced for.

Although it was planned that the project would be completed by the end of March 2010 as stated in Progress Report Nr 6, DFID have indicated that the consultants must continue with project activities until June 30th 2010. Additionally, the TC Contract value has been reduced in effect by 18% if the due allowances for inflation and currency fluctuation are considered. This will have a significant impact on activities in the remainder of the project. A Contract Amendment has now been signed between DFID and the lead consultant that seals these new conditions.

Details are presented in the following sections.

9.2.2 International Consultants

The main core team of international consultants are given in Table 9.1.

Table 9.1: Main International Consultants

Location	Post	Name	Support
CPMO	ATL	Don Moore	Wang Yue
CCS	Water Lawyer	Dr George Radosevich	Stephen Hodgson
CCS	Socio-economist	Dr John Taylor	(Local only)
CCS	IWRM Documentation Expert	Alison Stuck	Jenny Wang, Simon Howarth
G1	Int Case Study Leader	Simon Howarth / Clive Lyle	Dr Robin Wardlaw, Don Moore
G2A and G2B	Int Case Study Leader	Simon Howarth	Dr D Vermillion
G3	Int Case Study Leader	Jan van Wonderen	Simon Howarth
L1	Int Case Study Leader	Don Moore	Roar Jensen,
L2	Int Case Study Leader	Dr Larry Quinn	Fang Songchuan,

Location	Post	Name	Support
			<i>Dr Frances Elwell</i>
<i>L3</i>	<i>Int Case Study Leader</i>	<i>Ron Dorn</i>	<i>Peter Mawson and David Kane</i>

In table 9.1, the italics relates to individuals who can be called upon to provide additional information on the provincial activities and specialist areas should the need arise during the preparation of the Central Case Study documentation material.

There are many additional support experts in various areas. These were presented in Six Monthly Progress Report No 1 – no major changes have taken place over the last six months.

The current overall cost of the international consultants to the end of December 2009 is 90 % of that covered by the revised contract (Nov/Dec 2009) for consultancy services between the consultant and DFID. Inputs of international staff are also overall 90% of contract numbers whilst the project is 90% completed timewise if a completion date of July 1st 2010 is taken (6 months remaining over a 60 month duration project).

The first figure in Appendix C indicates the overall expenditure profile of international consultancy fees as a percentage of contract value (See page C-2). The expenditure to date continues to be controlled in basically a straight line profile related to full project duration. This is at a reduced spend rate compared to the original contract basis and the planned inputs as defined in the December 2005 Inception Report and is due to the fact that it is now realised by the international consultant that continued support will be required through out the duration of the project rather than the tailing off as had been originally envisaged as hand-over of project implementation was effected.

Also presented in Appendix C is a graph presenting the expenditure profiles of the various staffing categories of international consultants (see Page C-3). Overall, the expenditure profile again equates to a uniform spend over the whole project duration. It has been difficult to manage the inputs against project deliverables but it is considered that adequate control has been achieved within the project budget. It should be noticed that international consultancy activity has been constrained over the last six or more months (post July 2009) since it was first indicated that there would be a cut-back in the TC Contract for consultancy services.

A table is presented in Appendix C that defines precisely the inputs, planned, expended and remaining associated with all the defined international consultants. The table also indicates some of the international staff changes made. Some staff have exceeded current inputs as defined in the Contract Agreement, however there are many areas where savings can be made. Another request for a modification to the contract agreement is being made to accommodate a revision of planned inputs to the end of the project. Such a change will not require any increase in the value of the consultancy agreement in relation to international staff.

Looking in more detail at the support costs for the international consultants, the main overspend area that might be thought an issue is still associated with international travel (see Page C-3). This is because the estimate included in the November 2009 Contract Amendment was not precise enough. It is hoped to correct this shortly.

An area of continued concern is that related to translation and interpreter costs as mentioned in earlier progress reports. Requirements are higher than envisaged since there has been a greater demand for the translation of project documents from English to Chinese and not as many documents produced originally and solely in Chinese than originally envisaged. This would have been the case had more counterpart staff and central level consultants been available. There is a drive to try and avoid the need for too much document translation.

9.2.3 Beijing based Consultants

Central level consultants are principally from the three organisations, IWHR, Xinhua IECCO and CIAD. The key staff were presented in Six Monthly Progress Report No 1. The significant involvement of the Beijing based consultants has been required over recent months but some problems exist in relation to the sustained availability of key and new individuals. This is due to the pressure of work in there respective organisations, often working on MWR related activities.

Staff involved in the Climate Change Studies have included staff from:

- Institute of Environment and Sustainable Development in Agriculture (IEDA), Chinese Academy of Agricultural Sciences and the
- Centre for Water Resources Research (CWRR), Chinese Academy of Sciences (CAS).

New consultants have now been incorporated in the overall team to address the issue of CCS documentation finalisation and the process of dissemination. These consultants are from:

- Institute of Hydrology & Water Resources, School of Civil Engineering, Tsinghua University
- Institute of Science Communication, China.

Specifically, the staff being:

Company/Organisation	Major	Name
Tsinghua University	Water resources management	Prof Wang Zhongjing
China Institute of Water Resources and Hydropower Research	Water resources management	Professor Shen Dajun
China University of Political Science	Environmental Law	Professor Wang Rong
Tsinghua University	Water resources management	Dr Zheng Hang
Tsinghua University	Water resources	Huang Pengfei
Tsinghua University	Water resources	Ma Zhenzhen
External editor	Editor	Huang Sarina
Institute for Science Communication	Economics and Management	Professor Zhang Zhengmao
Institute for Science Communication	Communication	Ass Professor Jin Yi
Institute for Science Communication	Public management	Shu Zhibao

Company/Organisation	Major	Name
Institute for Science Communication	Cognitive Science	Bu Yong
Institute for Science Communication	Communication	Zhang Quantao

The utilisation of national/Beijing based consultants is presented in a graph presented in Appendix C (page C-5).

9.2.4 Gansu Provincial Consultants

The key staff were presented in Six Monthly Progress Report No 1.

All consultancy services have been completed.

All inputs have been provided within the man-months allowed under the contract. This covers both the inputs required for the work as defined in the Project Memorandum and for the work associated with the Extension Studies.

The management of consultancy inputs was in the end well expedited by the management teams of the Gansu Water Resources and Hydrology Bureau.

9.2.5 Liaoning Provincial Consultants

The key staff were presented in Six Monthly Progress Report No 1.

All consultancy services have been completed.

All inputs have been provided within the man-months allowed under the contract. This covers both the inputs required for the work as defined in the Project Memorandum and for the work associated with the Extension Studies.

The management of consultancy inputs was in the end well expedited by the management teams of the Liaoning Water Resources and Hydrology Bureau.

In addition the local consultants continue to provide assistance when requested to do so in clarifying activities that have been undertaken. It is also likely that additional involvement may be required in relation to providing additional assistance to the Chaoyang WAB and EPB in relation to water quality modelling work whilst further involvement is expected in relation to the preparation of a simple guidance note for the preparation of IWRM Plans that the Department of Water Resources in Liaoning believe would be useful to them.

9.3 Financial Aid Component (FA)

Improved effective management of the FA budget has continued.

In the Back-to-Office report by DFID in relation to a review of FA management, the feedback included:

“The financial review was carried out by the independent consultant in the two provinces and the CPMO. In general, the progress was good particularly in the two provinces. Most recommendations given at last annual review have been followed.”

A Work Plan for activities in 2010 is under preparation. This will provide details of:

- Conferences;
- Workshops or Seminars;
- Training;
- Document printing;
- Other media costs;
- 2010 Study Tour to UK in April (to be finalised).

With the main dissemination period being now confined to the period January to June 2010, this is likely to be a high expenditure busy period.

In the Table below, Table 9.2, is presented a simple analysis of the FA expenditure to date. Overall the expenditure is considered to be in line with activities and to some extent reflects counterpart involvement in the project with some areas of over-expenditure but mostly under-expenditure at all levels. However, some items were possibly over-budgeted for at the outset.

Table 9.2: Analysis of FA Budget Expenditure to date

Budget Line of Project		Description	Accumulative Eligible Expenditure by end December 2008	Accumulative Eligible Expenditure by end December 2009	Residual percentage
CPMO/ CCSO	T1	Travel (Air Fare)	66.71%	74.50%	25.50%
	T2	Accommodation	65.18%	74.69%	25.31%
	C1	Workshops & Seminars	28.70%	31.25%	68.75%
	C3	Training	22.45%	22.45%	77.55%
	C4	Study tours	34.39%	34.39%	65.61%
	E2	Office Equipment	46.74%	46.74%	53.26%

Budget Line of Project		Description	Accumulative Eligible Expenditure by end December 2008	Accumulative Eligible Expenditure by end December 2009	Residual percentage
	E4	GIS	0.00%	0.00%	100.00%
	R1	Office Running Costs	75.87%	79.37%	20.63%
	R2	Vehicle Running Costs	63.65%	63.80%	36.20%
	R3	Report Production	55.11%	57.42%	42.58%
		Saving	11.10%	14.78%	85.22%
	sub-total		36.00%	38.61%	61.39%
Gansu	T1	Travel (Air Fare)	69.23%	86.38%	13.62%
	T2	Accommodation	71.02%	92.41%	7.59%
	C1	Workshops & Seminars	72.91%	94.20%	5.80%
	C3	Training	74.50%	91.33%	8.67%
	C4	Study tours	60.81%	91.55%	8.45%
	E1	Vehicle procurement	100.00%	100.00%	0.00%
	E2	Office equipment procurement	100.00%	100.00%	0.00%
	E3	Hydrometric equipment procurement	100.00%	100.00%	0.00%
	E4	GIS	93.12%	95.39%	4.61%
	R1	Office Running Costs	82.98%	100.03%	-0.03%
	R2	Vehicle Running Costs	92.49%	99.99%	0.01%
	R3	Report Production	36.40%	98.21%	1.79%
	R4	Minqin WEAP/ GIS	0.00%	94.13%	5.87%
		Savings	100.00%	100.00%	0.00%
sub-total		75.92%	96.57%	3.43%	
Liaoning	T1	Travel (Air Fare)	65.53%	85.77%	14.23%
	T2	Accommodation	89.36%	102.24%	-2.24%
	C1	Workshops & Seminars	48.45%	93.87%	6.13%
	C3	Training	60.62%	95.87%	4.13%
	C4	Study tours	54.05%	253.54%	-153.54%
	E1	Vehicle procurement	100.00%	100.00%	0.00%
	E2	Office equipment procurement	100.00%	100.00%	0.00%
	E3	Hydrometric equipment procurement	100.00%	100.00%	0.00%
	E4	GIS	76.84%	98.00%	2.00%
	R1	Office Running Costs	88.58%	99.89%	0.11%
	R2	Vehicle Running Costs	86.83%	99.83%	0.17%
	R3	Report Production	31.84%	98.92%	1.08%
	sub-total		74.97%	98.03%	1.97%
Total			63.12%	79.04%	20.96%

10 Equipment and Software Procurement

10.1 CPMO / CCS

The CPMO-CCSO joint office is still established on the 9th floor of the Ji Ye Building, No 10 Nan Xian Ge Road, Beijing. Procurement and installation of office equipment is complete and is adequate for current levels and form of activity.

During the reporting period no new equipment has been procured or supplied.

10.2 Gansu

Supply of all equipment, software and other items is complete.

All have been registered and guardianship responsibilities assigned as required by DFID.

10.3 Liaoning

Supply of all equipment, software and other items is complete.

All have been registered and guardianship responsibilities assigned as required by DFID.

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Appendix A CCS Documentation Programme Material (Main)

	<i>CCS Booklet Series</i>	English		Chinese		
		Finished	Progress %	Sent to TU	Internal Review/ Polish %	Translation %
U1	IWRM BEST PRACTICE – INTERNATIONAL PERSPECTIVE		90			0
U2	OVERVIEW DOCUMENT FOR WATER DEMAND MANAGEMENT		70			0

	<i>CCS Booklet Series</i>	English		Chinese		
		Finished	Progress %	Sent to TU	Internal Review / polish %	Translation %
1	Water Resources and Demand Assessment					
1.1	Models for Water Resources Planning and Management					
TP1.1	Groundwater Flow Modelling	✓	100	✓	100	100
AN1.1	Models for Water Resources Planning and Management: Selection Procedures	✓	100	✓	100	100
1.2	Groundwater Resources Assessment					
TP1.2	Groundwater Resource Quantity Assessment	✓	100	✓	100	100
1.3	Using the WEAP Model for Water Resources Planning and Management					
AN1.3	Use of WEAP model in IWRM planning	✓	100	✓	100	100
1.4	Using the MIKE BASIN Model for Water Resources Planning and Management					
AN1.4	Use of MikeBasin model in IWRM planning		Review			
1.5	Water Quality Modelling for Water Resources Planning and Management					
TP1.5	Use of Water Quality Modelling for Water Protection	✓	100		0	100
AN1.5	Use of QUAL2K Water Quality Model in IWRM Planning		95		0	95
EG1.5	Water Quality Modelling in Chaoyang, Liaoning Province		95		0	95
1.6	Data for Water Resources and Demand Assessments					
TP1.6	Data preparation for water resources assessment modelling		80			0
1.7	Monitoring for Water Resources Assessments					
AN1.7	Designing a Monitoring Programmes for Water Quality Modelling	✓	100		0	100
1.8	Establishing Demands					
TP1.8	Demand Forecasting		90		0	0
AN1.8/1	Demand Forecast		95		0	95
EG1.8	Demand Forecast		95		0	95
AN1.8/2	Agricultural Water Use Norms	✓	95		0	95
1.9	Climate Change Studies					
TP1.9	Climate Change Impacts on Water Resources and its Management		0			0
EG1.9	Climate Change Impacts Studies and Adaptation in SRB and DRB		0			0
2	Integrated Water Resources Management and Planning					
2.1	IWRM Planning					
AN2.1	Developing an IWRM plan		0			0
2.2	Stakeholder Participation for Water Resources Planning					

	<i>CCS Booklet Series</i>	English		Chinese		
		Finis hed	Prog ress %	Sent to TU	Internal Review / polish %	Tra nsla tion %
	and Management					
TP2.2	Sector Coordination and User Participation in IWRM planning		70			0
EG2.2	Stakeholder Analysis for WRDMAP Case Studies		90			0
2.3	Developing and Modelling Scenarios for IWRM Planning					
AN2.3	Water Resources Scenario Development and Scenario Modelling	✓	100		5	100
2.4	Environmental Issues in IWRM Planning					
TP2.4	Environmental Flow – concepts and methods	Aus	0			0
AN2.4/ 1	Environmental Risk Assessment		98			0
AN2.4/ 2	Introducing Environmental Flow into the Water Allocation Process		60			0
AN2.4/ 3	Water Management to Protect Groundwater Dependent Ecosystems		20			0
2.5	Drought Management Planning					
TP2.5	Drought Management Planning - International and Chinese Experience		95			0
AN2.5	Developing a Drought Management Plan 干旱管理规划的制定		95		0	95
M2.5	Using the Standardised Precipitation Index (SPI) to Assess Drought Condition	✓	100	✓	100	100
EG2.5	Preparation of a Drought Management Plan for Chaoyang Municipality, Liaoning Province		95		0	95
2.6	Groundwater Management					
TP2.6/ 1	Groundwater Management	✓	100	✓	100	100
TP2.6/ 2	Groundwater Monitoring and its importance to IWRM	✓	100	✓	100	100
TP2.6/ 3	Conjunctive Use of Groundwater and Surface Water	✓	100	✓	100	100
EG2.6	Conjunctive Use of Groundwater and Surface Water in Minqin	✓	100	✓	100	100
AN2.6/ 1	Groundwater Monitoring – River Basin to County Levels	✓	100	✓	100	100
AN2.6/ 2	Groundwater Monitoring at Village Levels	✓	100	✓	100	100
2.7	Water Allocation					
AN2.7	Water Allocation Planning		50			
2.8	Economic Analysis for IWRM Planning					
AN2.8	Economics for IWRM Planning		20			0
EG2.8	Economics for IWRM Planning - Shiyang River Basin IWRM Plan		30			0
3	Demand Management / Water Use Efficiency					
3.1	Water Saving in Agriculture					
TP3.1	Water Saving in Irrigated Agriculture	✓	100	✓	100	100
AN3.1/ 1	Agricultural Water Saving Techniques (WMS/WAB level)	✓	100	✓	100	100
AN3.1/ 2	Practical Techniques for On-Farm Water Saving		90	✓	100	100
3.2	Demand Management for Urban Water Supplies					

	<i>CCS Booklet Series</i>	English		Chinese		
		Finis hed	Prog ress %	Sent to TU	Internal Review / polish %	Tra nsla tion %
TP3.2	Urban Water Supply Demand Management		90		0	90
3.3	Reducing Unaccounted For Water in Urban Supply Systems					
TP3.3	Active Leakage Control as a Key Component in Increasing Efficiency in Urban Water Supply		98		0	98
AN3.3/1	Implementing an Active Leakage Control Programme for a Small Water Supply Company		99		0	99
AN3.3/2	Asset management and GIS for a Small or Medium Size Water Supply Company		95		0	95
M3.3	Active Leakage Control Manual for Small to Medium Size Water Supply Company	✓	100		0	100
3.4	Demonstrating Water Savings					
AN3.4	Auditing of Water Saving Society		65		0	65
4	Administrative Regulation					
4.1	Abstraction Licensing Systems					
TP4.1	Abstraction Licensing Systems - International Experience		95		0	95
AN4.1	Water Abstraction Permit Auditing		0		0	0
EG4.1	Water Abstraction Permit Guidelines for SRB		95		0	95
4.2	Discharge Licensing Systems					
TP4.2	Waste Water Permitting		80			0
	Regulation of Small Water Companies					
TP4.3	Regulation of Small and Medium Size Water Supply Company		95		0	95
5	Economic Regulation					
5.1	Socio-economic Issues (including poverty) related to IWRM Approaches					
TP5.1	Economic Instruments in IWRM		?			
5.2	Irrigation Service Charges					
TP5.2	Assessment of Irrigation Service Charges for Surface Water Irrigation Schemes		80			0
5.3	Water Resource Fees					
TP5.3	Water Resource Fees		70			70
5.4	Tariff Setting for Urban Water Supplies					
AN5.4	Tariff Setting for a Small to Medium Sized Water Supply Company	✓	100	✓	100	100
EG5.4	Tariff Setting for Beipiao Water Supply Company	✓			30	100
5.5	Willingness to Pay					
AN5.5	Willingness to Pay Surveys (Urban Water Supply)	✓			0	100
EG5.5	Willingness to pay survey for Beipiao Water Supply Company	✓			0	100
5.6	Affordability of Water					
5.7	Financial Management for Small and Medium Water Supply Companies					
TP5.7	Financial Management and Modelling in Small and Medium WSCs		80			0
M5.7	The Development and Use of a Model for Financial Analysis of a Small to Medium sized WSC in China	✓	100		50	100
6	Social Change and Water Saving Society					
6.1	Water User Associations and Water Saving Society					
AN6.1/1	Role of WUA in Water Saving in Groundwater	✓	100	✓	100	100
AN6.1/1	Farmers Guide to Groundwater WUAs	✓	100	✓	100	100

	<i>CCS Booklet Series</i>	English		Chinese		
		Finis hed	Prog ress %	Sent to TU	Internal Review / polish %	Tra nsla tion %
2						
EG6.1	WUAs in Groundwater Areas		80			0
6.2	Strengthening of WUAs					
AN6.2/ 1	Administrative Steps for Developing Strong WUAs	✓	100	✓	100	100
AN6.2/ 2	WUA Institutional Document Guides	✓	100	✓	100	100
AN6.2/ 3	Village Level Planning of WUAs	✓	100	✓	100	100
AN6.2/ 4	Promoting and Training of WUAs	✓	100	✓	100	100
6.3	Social Issues related to IWRM					
TP6.3/ 1	Social Issues in IWRM		10			0
TP6.3/ 2	Assessing the Impact of IWRM on Women's Status and Conditions		90			90
AN6.3	Socio-economic Monitoring		80			0
7	Conflict Resolution by Participation and Consultation					
7.1	Multi-criterion Analysis as a tool for allocating resources					
TP7.1	Multi-criterion Decision Analysis – An Introduction	✓	100			0
AN7.1	Using Multi-criterion Decision Analysis		70			0
EG7.1	Simplified Multi-criterion Decision Analysis for the Shiyang River Basin IWRM Plan		90			0
8	Information Exchange					
8.1	Data Sharing, Management and IWRM					
AN8.1	Data Sharing and Data Management (Knowledge Management)		0			0
8.2	Use of Geographic Information Systems in IWRM					
AN8.2	Use of GIS in IWRM		?			90
8.3	Monitoring and Reporting					
AN8.3	M&E		0			0
8.4	Collaborative Working and Data Sharing					
TP8.4	Inter-agency Collaboration for Improved Water Quality Management		80		0	80
AN8.4	Use of Inter-agency Agreements for Collaborative Water Quality Management		99		0	99

Appendix B Milestone Summary Table

Nr	Item/ Study	Milestones	Expected month of achievement	Actual PMB Approval
YEARS 1 to 3				
1	CCS	Development of a remote access process for the intranet site or the separate construction of a Water Community Extranet Site.	4 # Nov05	16 May 2006
2	All	Inception Report	6 # Jan06	16 May 2006
3	G1	High turnout at IWRM Awareness workshops in Lanzhou, Wuwei and Jinchang	7 # Feb06	2 Nov 2006
4	L1	High turnout at IWRM Awareness workshops in Chaoyang and other selected towns including Beipiao.	8 # Mar06	2 Nov 2006
5	G2	Trial areas approved for trialling demand management approaches	10 # May06	2 Nov 2006
6	L1	Training programme undertaken and effective. Individuals able to define how IWRM will affect their roles and activities in water management.	11 # Jun06	8 Feb 2007
7	L2	GIS produced of current abstraction and discharge permitting details in Chaoyang. (Integrated into work of Case Study L.1).	11 # Jun06	2 Nov 2006
8	G1	Completion of SRB water resources profile document through a participative process.	12 # Jul06	8 Feb 2007
9	CCS	Draft guidelines and manuals on IWRM and the use of tools to facilitate IWRM and demand management at the river basins level produced.	12 # Jul06	24 Sep 2007
10	G2	Feedback report on the effectiveness and acceptance of the various current forms of fee types reported and disseminated	14 # Sep06	8 Feb 2007
11	L2	Inventory of abstraction and discharge permits shared between WAB and EPB with responsibilities defined for upkeep and working document and technical guideline note produced defining how water qualities in surface and groundwaters will be jointly managed by WRB and EPB clearly defining roles.	14 # Sep06	8 Feb 2007
12	L1	Completion of Daling water resources profile document through a participative process. This being presented at a workshop.	16 # Nov06	15 Jun 2007
13	G1	Basin Water Resource Master Plan published and distributed to stakeholders and workshop held to disseminate the information in and implications of the Plan.	17 # Dec06	11 Mar 2009
14	L3	Baseline survey of Beipiao WSC management, operation and performance. Report thereon with GIS appendix.	18 # Jan07	15 Jun 2007
15	G2	Training programme undertaken with feedback on receipt/effectiveness reported. Individuals able to define how demand	19 # Feb07	15 Jun 2007

		management will affect their roles and activities in water management.		
16	L3	Training of WSC staff in technical, regulatory and financial management and public consultation.	19 # Feb07	18 Jun 2008
17	G3	Status Report and Water Use Profile for Minqin produced by WRB in discussion with WUAs	20 # Mar07	20 Dec 2007
18	L2	Preparation of Drought Action Plan incorporating guidelines for the management of abstraction and discharge permits during drought situations with meetings in several parts of Chaoyang municipality where the drought management provisions are presented /discussed.	21 # Apr07	18 Jun 2008
19	L3	Baseline survey of Beipiao WAB, regulations and procedures. Report thereon with GIS appendix.	21 # Apr07	18 Jun 2008
20	G3	Establishment of WUA mandates and acceptance by WRBs.	23 # Jun07	18 Jun 2008
21	L1	Basin Water Resource Master Plan (IWRM) submitted to Liaoning WRD and once approved by LWRD, Basin Water Resource Master Plan (IWRMP) published and distributed to stakeholders.	24 # Jul07	2 Dec 2009
22	CCS	Holding of an annual Water Legislation workshop in MWR Beijing, Lanzhou (Gansu) and Shenyang (Liaoning) and the production of the first annual summary report on the development of new legislation, decrees and administrative instructions in Gansu and Liaoning with particular reference to the Case Studies.	24 # Jul07	NOT ACHIEVABLE. ACCEPTED BY DFID AS SO
23	L3	Baseline survey of socio-economic conditions in Beipiao with particular focus on water availability, water supply reliability and affordability, associated health issues and overall community relationships with regard to water, WAB and WSC. Report thereon with GIS appendix.	27 # Oct07	18 Jun 2008
24	G3	Trial issue of permits to model WUAs in case study areas.	28 # Nov07	NOT ACHIEVABLE. ACCEPTED BY DFID AS SO
25	L3	Implementation of water saving plan by WSC. Production of a water saving plan through stakeholder consultation. Issuance of the plan to operational offices and planning organisations. Public announcement of the measures.	28 # Nov07	Will not be achieved! (WSC do not wish to persue). DFID accept the situation.
26	G1	Case Study G1 Report	34 # May08	11 Mar 2009
27	G2	Case Study G2 Report	34 # May08	11 Mar 2009
28	G3	Case Study G3 Report	34 # May08	11 Mar 2009
29	L1	Case Study L1 Report	34 # May08	11 Mar 2009
30	L2	Case Study L2 Report	34 # May08	11 Mar 2009
31	L3	Case Study L3 Report	34 # May08	11 Mar 2009
32	G3	Undertaking the first training session on the roles and responsibilities of WUAs.	34 # May08	18 Jun 2008

		Programme designed for repeat training each year before the irrigation season.		
33	All	Combined Final Report	36 # Jul08	2 Dec 2009
YEARS 4 and 5				
34	CCS	Undertaking 6 workshops in non-project provinces to disseminate project lessons in relation to demand management procedures and mechanisms;	40 # Nov08	WITH REDUCED CONTRACT SUM – TASK HAS BEEN DISCONTINUED. DFID are aware and accept the situation. Would be covered by MWR Dissemination Strategy
35	CCS	Undertaking 6 workshops in non-project provinces to disseminate project lessons in relation to integrated water resources management through participatory processes;	44 # Mar09	WITH REDUCED CONTRACT SUM – TASK HAS BEEN DISCONTINUED. DFID are aware and accept the situation. Would be covered by MWR Dissemination Strategy
36	CCS	Production of operational manuals (simple) to guide water resources management personnel in consultative and participatory processes;	48 # Jul09	
37	CCS	Production of simple explanatory broadsheets (or similar) and posters related to project findings, summary guidelines and awareness campaigns in line with the project dissemination strategy and programme (milestone to be the production of the first 4 products);	50 # Sep09	
38	CCS	Introduction of case study lessons and project recommendations into MWR training material.	52 # Nov09	<i>Depends on MWR Dissemination Strategy</i>
39	CCS	Introduction of case study lessons and project recommendations into Gansu Province WRD/EPA training material.	54 # Jan10	<i>Depends on MWR Dissemination Strategy</i>
40	CCS	Introduction of case study lessons and project recommendations into Liaoning Province WRD/EPA training material.	54 # Jan10	<i>Depends on MWR Dissemination Strategy</i>

Note:

1. Expected month of achievement is related to July 1st 2005.
2. Modifications are possible based on the recommendations of the Inception Report.

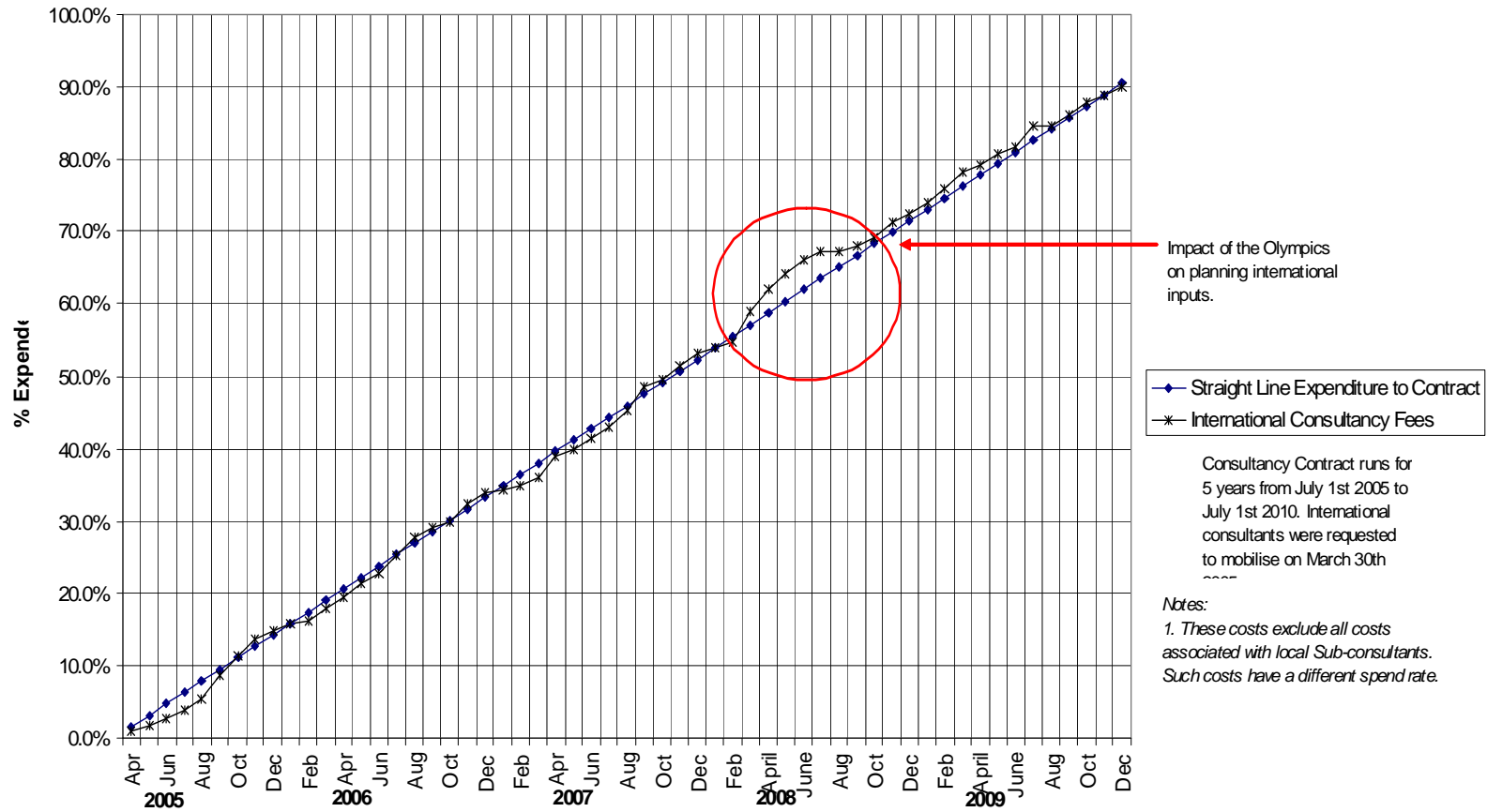
Extension Activities

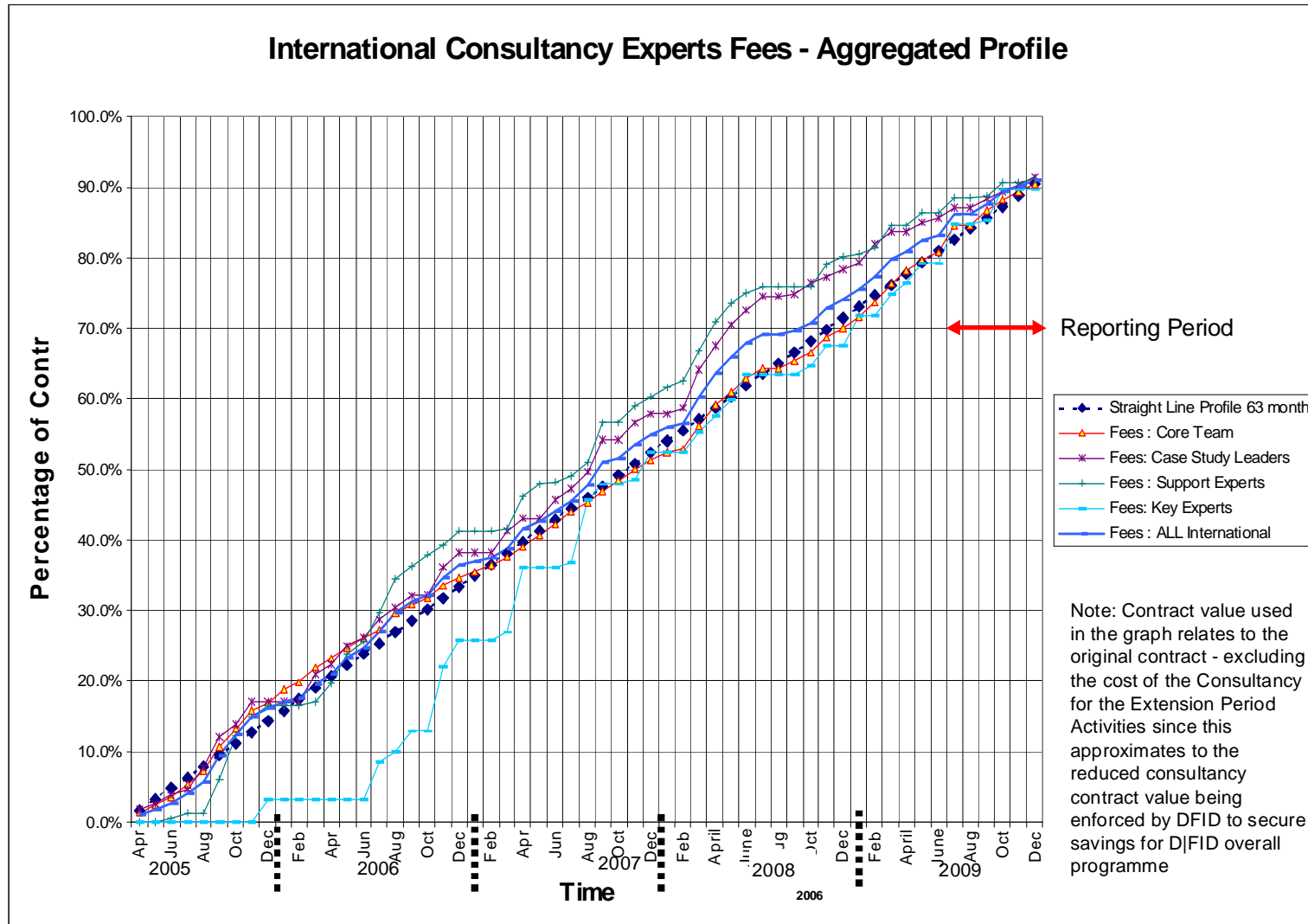
Nr	Item/ Study	Milestones	Expected month of achievement	Actual PMB Approval
E1	L1	Creation of time series data for use in the Mike Basin Model	Sep 2008	11 Mar 2009
E2	G1	Creation of time series data for use in the Mike Basin Model	Sep 2008	11 Mar 2009
E3	G3	Summary Note of Activity – Abstraction permits / Household Water Rights / Ticketing System	Jan 2009	2 Dec 2009
E4	L1	IWRM Plan for the whole Daling River Basin	Apr 2009	BASICALLY COMPLETED BY LOCAL

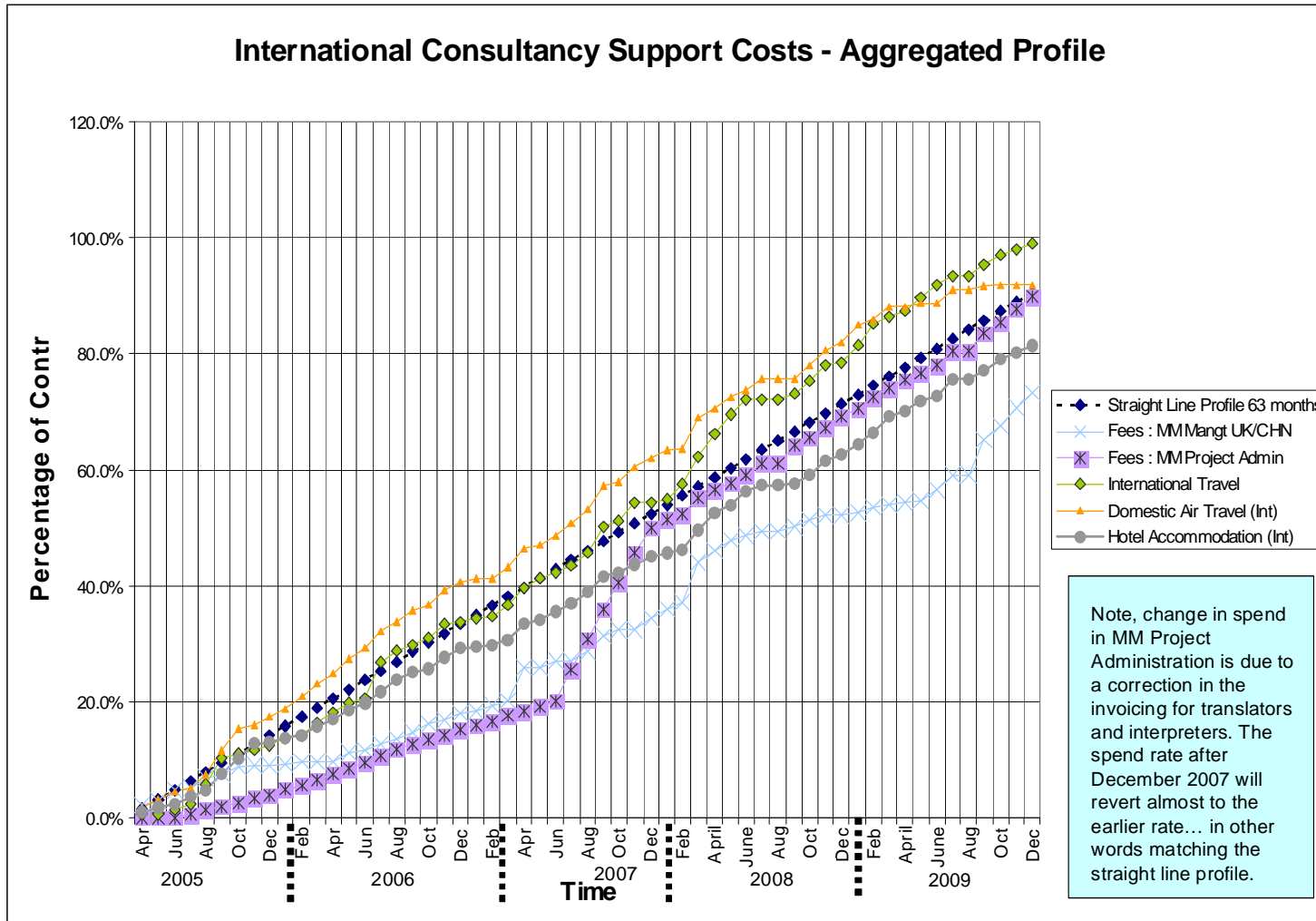
Nr	Item/ Study	Milestones	Expected month of achievement	Actual PMB Approval
				CONSULTANTS.
E5	G2	Workshop on the Auditing of Abstraction Permits	May 2009	2 Dec 2009
E6	G1	Climate Change Report – Shiyang River Basin	Jun 2009	2 Dec 2009
E7	L1	Climate Change Report – Daling River Basin	Jun 2009	2 Dec 2009
E8	G1/L1	Climate Change Workshop (Daling & Shiyang)	Jun 2009	2 Dec 2009
E9	G2	Summary Note of Activity – Water Saving Trials (G2A)	Oct 2009	
E10	G1	Draft Guidelines for transfer of Surface Water from upstream to downstream in the Shiyang River Basin	Nov 2009	WITH REDUCED CONTRACT SUM – TASK HAS BEEN DISCONTINUED. DFID are aware and accept the situation.

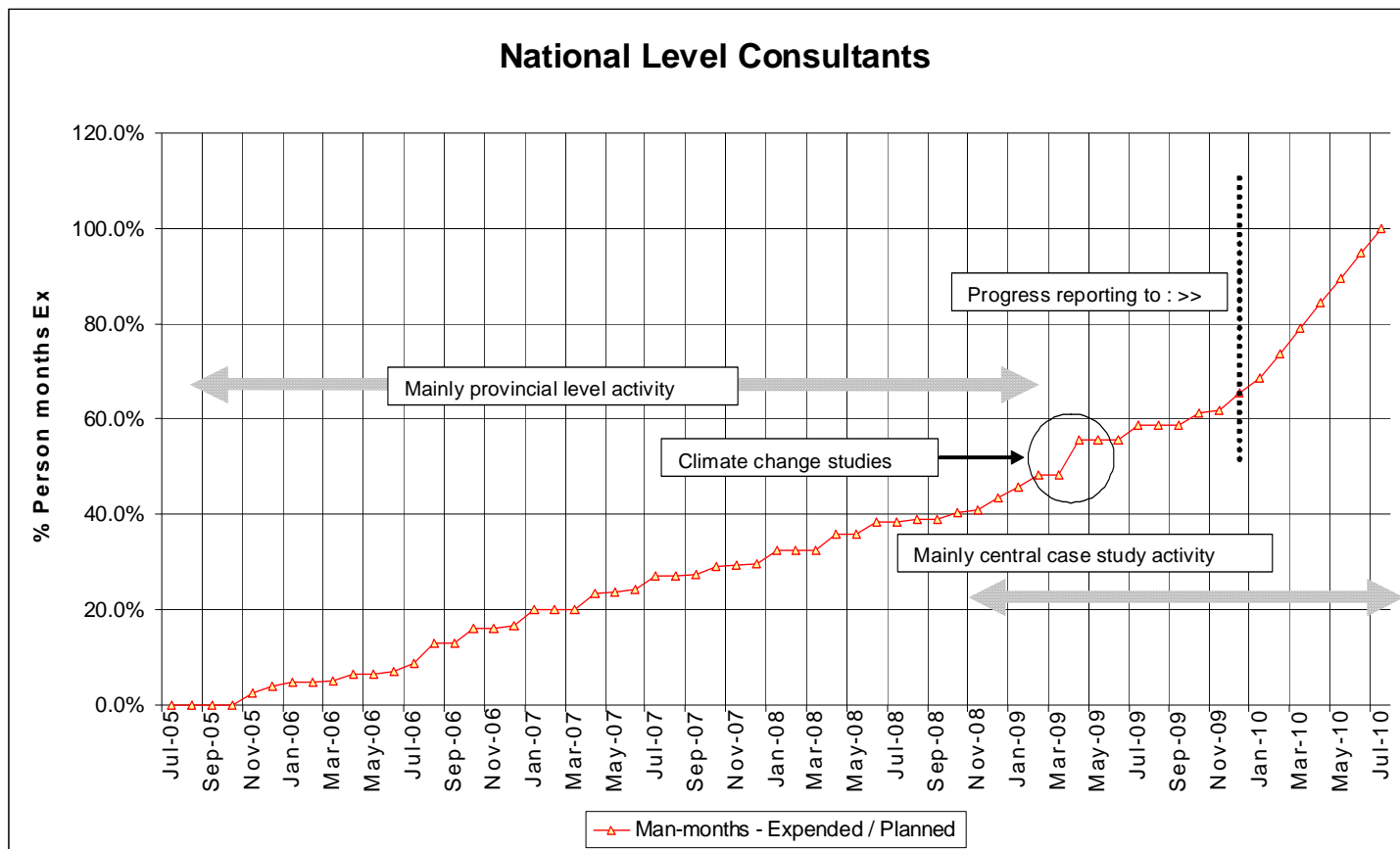
Appendix C Consultants inputs to date

WRDMAP International Consultancy Fees - to end Dec 2009









Overall Beijing based consultants man-months reduced with Consultancy Fee reduction imposed by DFID. However, the utilisation / availability of Beijing based consultants has been below original plan.

Water Resources Demand Management Assistance Project

International Staff Utilisation from start of Project to end of December 2009

(Although official Project start date was 1/7/2005, international inputs officially started on April 1st 2005).

Percentage of time expended: 90.0% of the 5 year, 60 month duration project
90.5% of the 63 month duration project

Item		Unit	Contract Amend 5	Used to end Jun 09	Used to end Dec 09	Remaining man-days	% Used to end Dec 09	Comment
Staff Inputs:	Position							
Don Moore (UK)	TL/Water Sector Planning	Days	55	40	44	11	80%	
Don Moore	TL/Water Sector Planning	Days	1167	1017	1122	45	96%	
Dr John Taylor	Social Development Expert	Days	302	247	264	38	87%	
Steve Parsons	Water Resources Expert	Days	99	88.9	88.9	10.1	90%	
Alison Stuck	Water Resources Expert	Days	332	228	324	8	98%	
Clive Lyle	River Basin Management Expert	Days	0	0	0	0		Inputs provided whilst working on case study G1
Dr George Radosevich	Water Rights & Legislation	Days	241	196	216	25	90%	
David Kane	Capacity Building Specialist	Days	82	70	70	12	85%	
Sun Yan Evans	Workshop Facilitator	Days	0	0	0	0		Not used
Catherine Watts	Water Resources Engineer	Days	110	110	110	0	100%	
Steve Parsons (UK)	Water Resources Expert	Days	2	1	2	0	100%	
			2390	1997.9	2240.9	149.1	94%	
Simon Howarth	Leader of Gansu G2	Days	517	403	477	40	92%	
Simon Howarth (UK)		Days	10	1.4	4.97	5.03	50%	
Clive Lyle	Lead of Gansu G1	Days	177	172	172	5	97%	No more inputs proposed. Tasks by others (Howarth)
Dr Andy Bullock	Support for Gansu G2 - Permitting	Days	36	36	36	0	100%	No more inputs proposed. Tasks by others (Howarth)
Simon Spooner	Lead of Liaoning L2	Days	179	179	179	0	100%	No more inputs proposed. Tasks by Dr Quinn
Larry Quinn	Lead of Liaoning L2	Days	130	112	112	18	86%	
Steve Parsons	Lead of Liaoning L1	Days	58.5	58.5	58.5	0	100%	No more inputs proposed. Tasks by others (ATL)
Steve Parsons (UK)	Lead of Liaoning L1	Days	0	0	0	0		
Ian Hogg	Lead of Liaoning L1	Days	118	118	118	0	100%	
Ron Dorn	Lead of Liaoning L3	Days	104	92	92	12	88%	
			1329.5	1171.9	1249.47	80.03	94%	
J Berkoff / C Finney	Water Resources Economist	Days	72	53	53	19	74%	
Sean Murphy	Economist/ Financial Analyst	Days	27	22	22	5	81%	
Paul Ward	Financial Analyst/Accountant	Days	30	30	30	0	100%	
Dr Stephen Hodgson	Legislation Drafting & Editing	Days	55	46	46	9	84%	
David Kane	Institutional & HRD Expert	Days	0	0	0	0		Inputs shown above under same name
Dr Joe Remenyi	Participation & Livelihoods Expert	Days	59	59	59	0	100%	Inputs complete. Dr John Taylor to complete.
M Murphy	Communication & Dissemination	Days	61	61	61	0	100%	
Jan van Wonderen	WRM & GW Modelling - Lead G3	Days	254	208.8	258.8	-4.8	102%	Agreement modification required to allocate more
Roar Jensen/ B Storm	GIS & WRA Modelling	Days	102	87	86	16	84%	
Ron Dorn	Municipal Water Supply Efficiency Spec	Days	0	0	0	0		Inputs shown above under same name
Peter Mawson	Economist/Tariff Expert (new)	Days	98	88	88	10	90%	
David Hearle	Training Specialist	Days	42	42	42	0	100%	
E Mallorie	GIS and Monitoring Specialist	Days	82	67	68	14	83%	
Dr Cristina Cesaro	Minority Specialist	Days	0	0	0	0		No inputs deemed necessary
Lu Caizhen	Gender Specialist	Days	107	107	107	0	100%	Inputs complete. Dr John Taylor to complete.
Bettina Blumling	Participation in WUAs & Gender	Days	0	40	0	0		Tasks undertaken by Dr John Taylor
Dr Douglas Vermillion	Local Governance Expert	Days	45	45	45	0	100%	
Frances Elwell	Modelling Expert - Water Quality	Days	110	95	95	15	86%	Agreement modification required to allocate more
Terry Evans	Leakage Detection Expert	Days	61	59	59	2	97%	
			1205	1109.8	1119.8	85.2	93%	
Dr Hector Garduno	Abstraction Permits	Days	36	29	29	7	81%	
Dr Martin Griffiths	Water Quality, Discharge Permits	Days	5	0	0	5	0%	
Dr Paul Moseley	Water & Environmental Policy & Permi	Days	0	0	0	0		No inputs deemed necessary
Dr Malcolm Douglas	Land and Water Conservation Expert	Days	0	0	0	0		No inputs deemed necessary
David Mittelheuser	Institutions	Days	38	23	23	15	61%	
Dr Robin Wardlaw	Surface Water Modelling	Days	298	254	302	-4	101%	Agreement modification required to allocate more
Dr Patricia Wouters	Legislation/Dispute Resolution	Days	0	0	0	0		No inputs deemed necessary
Prof Jeremy Purseglove	Environmentalist	Days	0	0	0	0		No inputs deemed necessary
Prof Mike Edmunds	Hydrogeologist	Days	0	0	0	0		No inputs deemed necessary
Declan Conway	Climate Change Expert	Days	0	0	0	0		No inputs deemed necessary
Vernon Copeland	Agronomist/Agriculturalist	Days	21	21	21	0	100%	
Dr Derek Jamieson	River Basin Management/Water Industr	Days	0	0	0	0		No inputs deemed necessary
Dr Tony Ballance	Utility management and regulation	Days	0	0	0	0		No inputs deemed necessary
			398	327	375	23	94%	
Jim Perry	Project Director (UK)	Days	8	2.5	4.5	3.5	56%	
Adrian Adams	Accounts Administrator (UK)	Days	55	44.53	58.27	-3.27	106%	
Christina Liu	Auditor (Hong Kong)	Days	4	4.2	4.2	-0.2	105%	
			67	51.23	66.97	0.03	100%	
	Inputs based on 6 day working week in China		5389.5	4657.83	5052.14	337.36	94%	