

**1. Introduction.....5**

**1.1. Project Overview .....5**

1.1.1. Cooperating agencies .....5

1.1.2. Purpose .....5

1.1.3. Scope .....5

1.1.4. Outcomes.....6

1.1.5. Marketing and Outreach .....6

**1.2. Project Background.....6**

**2. IWDW-WAQS Management and Operations.....7**

**2.1. Governing Board.....7**

2.1.1. Purpose, mission, duties .....7

2.1.2. Memorandum of Understanding .....7

**2.2. Oversight Committee .....7**

2.2.1. Purpose, missions, duties .....7

2.2.2. Password Protected website area.....8

2.2.3. Membership and contact information.....8

**2.3. Technical Committee .....8**

2.3.1. Purpose, missions, duties .....8

2.3.2. Website area .....8

2.3.3. Membership and contact information.....8

**2.4. Project Coordination.....8**

**3. Work Groups.....8**

**3.1. Standing.....8**

3.1.1. WAQS MPE.....8

3.1.2. IWDW Operations.....8

3.1.3. IWDW Stewards.....8

**3.2. Ad-hoc.....8**

3.2.1. IWDW Tools .....8

3.2.2. Monitoring Network Assessment.....8

**4. Modeling Activities.....8**

**4.1. Meteorology .....9**

4.1.1. Configuration.....9

4.1.2. MPE.....9

**4.2. Emissions .....9**

4.2.1. QA .....10

4.2.2. Base & future year projections.....10

**4.3. Air Quality.....10**

4.3.1. Sensitivity Studies.....10

4.3.2. Base & future year modeling.....10

4.3.3. MPE.....10

**4.4. Source Apportionment.....10**

**4.5. WAQS Modeling Platforms .....10**

4.5.1. 2008b .....10

4.5.2. 2011a .....11

4.5.3. 2011b .....13

4.5.4. 2014a .....14

<b>5.</b>	<b>Data Warehouse .....</b>	<b>14</b>
<b>5.1.</b>	<b>Synergies .....</b>	<b>15</b>
<b>5.2.</b>	<b>Data .....</b>	<b>15</b>
5.2.1.	Monitoring .....	15
5.2.1.1.	Standard Networks.....	15
5.2.1.2.	Special Studies.....	15
5.2.2.	WAQS Modeling Results .....	16
5.2.2.1.	Meteorological.....	16
5.2.2.2.	Emissions.....	16
5.2.2.3.	Air Quality.....	16
5.2.2.4.	Source Apportionment .....	16
5.2.3.	External Modeling Studies.....	16
5.2.3.1.	ARMS.....	16
5.2.3.2.	CARMMS/Mancos Shale .....	16
5.2.3.3.	RAQC O3 SIP .....	16
5.2.4.	GIS {shape files relevant to WAQS modeling and applications} .....	16
<b>5.3.</b>	<b>Tools.....</b>	<b>16</b>
5.3.1.	Data Delivery & Post processing.....	16
5.3.1.1.	Emissions.....	17
5.3.1.2.	AQ modeling results.....	17
5.3.1.3.	Source Apportionment results .....	17
5.3.2.	Data Visualization .....	18
5.3.3.	Metadata .....	18
5.3.4.	GIS {development}.....	18
5.3.4.1.	Metadata.....	18
5.3.4.2.	Emissions.....	18
5.3.4.3.	PGM output {plan for next phase of IWDW} .....	18
<b>5.4.</b>	<b>Operational Needs.....</b>	<b>18</b>
5.4.1.	Computing Hardware .....	18
5.4.1.1.	FTP server .....	18
5.4.1.2.	Database server .....	18
5.4.1.3.	Web server .....	18
5.4.2.	Website and Database software.....	18
5.4.3.	Data Transfer .....	18
5.4.4.	Data Storage .....	18
<b>5.5.</b>	<b>Data Request status report .....</b>	<b>18</b>
<b>5.6.</b>	<b>Staffing .....</b>	<b>18</b>
<b>6.</b>	<b>Appendices.....</b>	<b>18</b>
<b>6.1.</b>	<b>Timelines.....</b>	<b>18</b>
6.1.1.	Project.....	18
6.1.2.	WAQS Modeling .....	18
6.1.3.	IWDW Tools .....	18
<b>6.2.</b>	<b>WAQS/3SAQS Documents.....</b>	<b>18</b>
6.2.1.	Modeling Protocols.....	18
6.2.2.	Model Performance Evaluation.....	19
<b>6.3.</b>	<b>IWDW Documents .....</b>	<b>20</b>
6.3.1.	Status Reports .....	20
6.3.2.	Modeling Wiki .....	20
6.3.3.	Data Warehouse Wiki.....	20
<b>6.4.</b>	<b>Diagrams .....</b>	<b>20</b>
6.4.1.	WAQS Modeling DSS .....	20

- 6.4.2. Post processing ..... 20
- 6.4.3. IWDW Web infrastructure DSS {code behind, db architecture}..... 20
- 6.4.4. IWDW web architecture..... 20
- 6.4.5. Modeling Studies {NEPA and other modeling applications}..... 20
- 6.4.6. IWDW Data Requests and Projects..... 20
- 6.5. IWDW {tools & resources}..... 20**
  - 6.5.1. Data..... 20
    - 6.5.1.1. Bulk Data..... 20
    - 6.5.1.2. Emissions Data ..... 20
    - 6.5.1.3. Modeling Data ..... 20
    - 6.5.1.4. Monitoring Data..... 21
    - 6.5.1.5. Metadata..... 22
  - 6.5.2. Resources ..... 22
    - 6.5.2.1. Reference Documentation..... 22
    - 6.5.2.2. Community and Support..... 22
    - 6.5.2.3. Warehouse Operations and Management..... 22