Burmese Star Tortoise (*Geochelone platynota*)
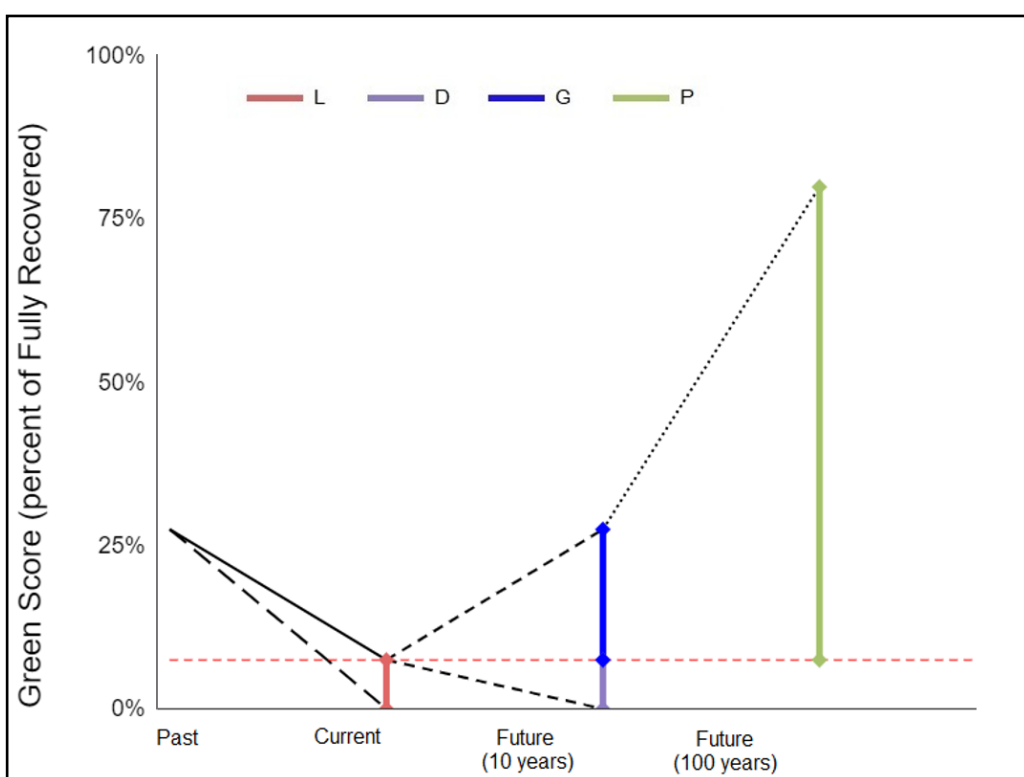

Figure S1. Graphical representation of the conservation metrics based on the Green Scores. Key: Vertical arrows represent the four conservation metrics: L – Conservation Legacy (may not appear if current and counterfactual states are the same); D – Conservation Dependence (may not appear if current and future-without-conservation states are the same); G – Conservation Gain (may not appear if current and future-with-conservation states are the same); P – Recovery Potential (may not appear if current and potential states are the same). The horizontal red dashed line represents the Current Green Score. Solid black line: observed change in the Green Score of the species (ignore it if "Former" state is not specified). Long-dashed black line: (counterfactual) past change expected in the absence of past conservation efforts. Dashed black lines: future scenarios of change expected with and without current and future conservation efforts. Dotted black line: long-term potential change expected with future conservation innovation and efforts.
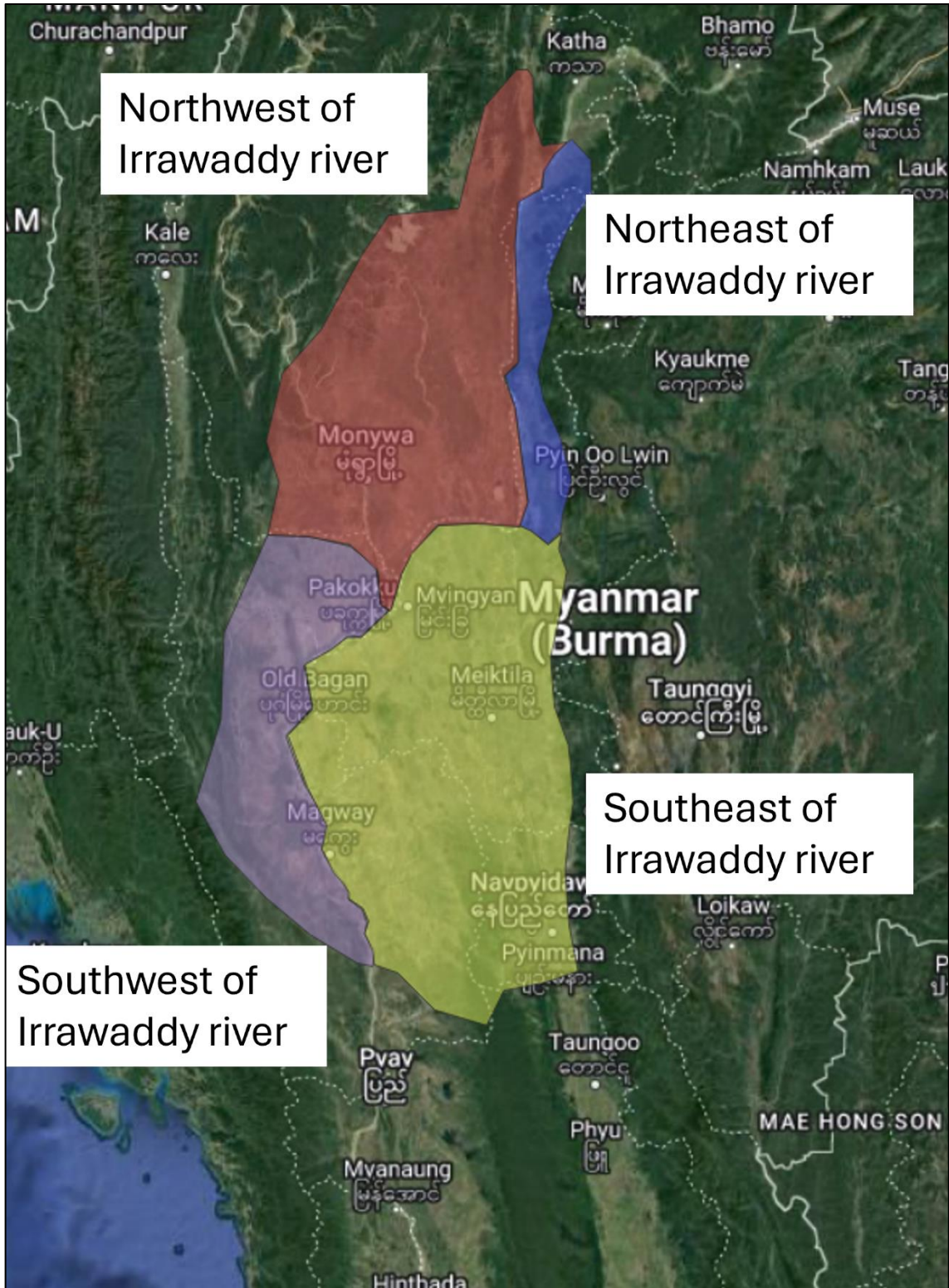
Figure S2, Presumed historical range based on Turtle Taxonomy Working Group (2021). Range divided into four spatial units around the Irrawaddy River.

Table S1: Conservation Actions ([list of action codes](#)).

Classification	Full description	Past actions (no longer occurring)	Current actions	Actions planned within 10 years	Actions that could be implemented in the long-term aspiration scenario
1.1.	1.1. Land/water protection: Site/area protection	x			x
1.2.	1.2. Land/water protection: Resource & habitat protection				
2.1.	2.1. Land/water management: Site/area management		x (management of protected areas, efforts to control fire)	x	x
2.2.	2.2. Land/water management: Invasive/problematic species control				
2.3.	2.3. Land/water management: Habitat & natural process restoration				x
3.1.1.	3.1.1. Harvest management		x	x	x
3.1.2.	3.1.2. Trade management		x	x	x
3.1.3.	3.1.3. Limiting population growth				
3.2	3.2 Species recovery				

Classification	Full description	Past actions (no longer occurring)	Current actions	Actions planned within 10 years	Actions that could be implemented in the long-term aspiration scenario
3.3.1.	3.3.1. Species re-introduction: Reintroduction		x	x	
3.3.2.	3.3.2. Species re-introduction: Benign introduction				
3.4.1.	3.4.1. Ex-situ conservation: Captive breeding/artificial propagation		x	x	x
3.4.2.	3.4.2. Ex-situ conservation: Genome resource bank				x
4.1.	4.1. Education and Awareness: Formal education				
4.2.	4.2. Education and Awareness: Training		x (recruitment and training of community conservation volunteers)	x	x
4.3.	4.3. Education and Awareness: Awareness & communications		x (public engagement in villages around release site (MWS)	x	x
5.1.1.	5.1.1. Legislation, International level		x (CITES)	x	x
5.1.2.	5.1.2. Legislation, National level		x (commercial harvesting illegal)	x	x

Classification	Full description	Past actions (no longer occurring)	Current actions	Actions planned within 10 years	Actions that could be implemented in the long-term aspiration scenario
5.1.3.	5.1.3. Legislation, Sub-national level				
5.1.4.	5.1.4. Legislation, scale unspecified				
5.2.	5.2. Policies and regulations				
5.3.	5.3. Private sector standards & codes				
5.4.1.	5.4.1. Compliance and enforcement- International level				
5.4.2.	5.4.2. Compliance and enforcement- National level		x (enforced by Fisheries Department and the Wildlife Conservation Division of the Forest Dept. Uncertain with political unrest	x	x
5.4.3.	5.4.3. Compliance and enforcement- Sub-national level				
5.4.4.	5.4.4. Compliance and enforcement- Scale unspecified				
6.1.	6.1. Livelihood, economic & other incentives: Linked enterprises & livelihood alternatives				
6.2.	6.2. Livelihood, economic & other				

Classification	Full description	Past actions (no longer occurring)	Current actions	Actions planned within 10 years	Actions that could be implemented in the long-term aspiration scenario
	incentives: Substitution				
6.3.	6.3. Livelihood, economic & other incentives: Market forces				
6.4.	6.4. Livelihood, economic & other incentives: Conservation payments				
6.5.	6.5. Livelihood, economic & other incentives: Non-monetary values				

Table S2. Threats (list of threat codes).

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
1.1	1.1 Residential & commercial development: Housing & urban areas				
1.2	1.2 Residential & commercial development: Commercial & industrial areas		x	x	x
1.3	1.3 Residential & commercial development: Tourism & recreation areas				
2.1.1	2.1.1 Agriculture & aquaculture: Annual & perennial non-timber crops: Shifting agriculture		x	x	x
2.1.2	2.1.2 Agriculture & aquaculture: Annual & perennial non-timber crops: Small-holder farming				
2.1.3	2.1.3 Agriculture & aquaculture: Annual & perennial non-timber crops: Agro-industry farming				
2.1.4	2.1.4 Agriculture & aquaculture: Annual & perennial non-timber crops: Scale Unknown/Unrecorded				
2.2.1	2.2.1 Agriculture & aquaculture: Wood & pulp plantations: Small-holder plantations				
2.2.2	2.2.2 Agriculture & aquaculture: Wood & pulp plantations: Agro-industry plantations		x	x	x

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
2.2.3	2.2.3 Agriculture & aquaculture: Wood & pulp plantations: Scale Unknown/Unrecorded				
2.3.1	2.3.1 Agriculture & aquaculture: Livestock farming & ranching: Nomadic grazing		x	x	x
2.3.2	2.3.2 Agriculture & aquaculture: Livestock farming & ranching: Small-holder grazing, ranching or farming		x	x	x
2.3.3	2.3.3 Agriculture & aquaculture: Livestock farming & ranching: Agro-industry grazing, ranching or farming				
2.3.4	2.3.4 Agriculture & aquaculture: Livestock farming & ranching: Scale Unknown/Unrecorded				
2.4.1	2.4.1 Agriculture & aquaculture: Marine & freshwater aquaculture: Subsistence/artisanal aquaculture				
2.4.2	2.4.2 Agriculture & aquaculture: Marine & freshwater aquaculture: Industrial aquaculture				
2.4.3	2.4.3 Agriculture & aquaculture: Scale Unknown/Unrecorded				
3.1	3.1 Energy production & mining: Oil & gas drilling				
3.2	3.2 Energy production & mining: Mining & quarrying		x	x	x

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
3.3	3.3 Energy production & mining: Renewable energy				
4.1	4.1 Transportation & service corridors: Roads & railroads		x	x	x
4.2	4.2 Transportation & service corridors: Utility & service lines		x	x	x
4.3	4.3 Transportation & service corridors: Shipping lanes				
4.4	4.4 Transportation & service corridors: Flight paths				
5.1.1	5.1.1 Biological resource use: Hunting & collecting terrestrial animals: Intentional use (species being assessed is the target)	x (likely to return)		x	
5.1.2	5.1.2 Biological resource use: Hunting & collecting terrestrial animals: Unintentional effects (species being assessed is not the target)	x (unlikely to return)			
5.1.3	5.1.3 Biological resource use: Hunting & collecting terrestrial animals: Persecution/control				
5.1.4	5.1.4 Biological resource use: Hunting & collecting terrestrial animals: Motivation Unknown/Unrecorded				
5.2.1	5.2.1 Biological resource use: Gathering terrestrial plants:				

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
	Intentional use (species being assessed is the target)				
5.2.2	5.2.2 Biological resource use: Gathering terrestrial plants: Unintentional effects (species being assessed is not the target)		x	x	
5.2.3	5.2.3 Biological resource use: Gathering terrestrial plants: Persecution/control				
5.2.4	5.2.4 Biological resource use: Gathering terrestrial plants: Motivation Unknown/Unrecorded				
5.3.1	5.3.1 Biological resource use: Logging & wood harvesting: Intentional use: subsistence/small scale (species being assessed is the target [harvest]				
5.3.2	5.3.2 Biological resource use: Logging & wood harvesting: Intentional use: large scale (species being assessed is the target)[harvest]				
5.3.3	5.3.3 Biological resource use: Logging & wood harvesting: Unintentional effects: subsistence/small scale (species being assessed is not the target)[harvest]		x	x	

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
5.3.4	5.3.4 Biological resource use: Logging & wood harvesting: Unintentional effects: large scale (species being assessed is not the target)[harvest]		x	x	
5.3.5	5.3.5 Biological resource use: Logging & wood harvesting: Motivation Unknown/Unrecorded				
5.4.1	5.4.1 Biological resource use: Fishing & harvesting aquatic resources: Intentional use: subsistence/small scale (species being assessed is the target)[harvest]				
5.4.2	5.4.2 Biological resource use: Fishing & harvesting aquatic resources: Intentional use: large scale (species being assessed is the target)[harvest]				
5.4.3	5.4.3 Biological resource use: Fishing & harvesting aquatic resources: Unintentional effects: subsistence/small scale (species being assessed is not the target)[harvest]				
5.4.4	5.4.4 Biological resource use: Fishing & harvesting aquatic resources: Unintentional effects:				

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
	large scale (species being assessed is not the target)[harvest]				
5.4.5	5.4.5 Biological resource use: Fishing & harvesting aquatic resources: Persecution/control				
5.4.6	5.4.6 Biological resource use: Fishing & harvesting aquatic resources: Motivation Unknown/Unrecorded				
6.1	6.1 Human intrusions & disturbance: Recreational activities				
6.2	6.2 Human intrusions & disturbance: War, civil unrest & military exercises		x	x	
6.3	6.3 Human intrusions & disturbance: Work & other activities				
7.1.1	7.1.1 Natural system modifications: Fire & fire suppression: Increase in fire frequency/intensity		x	x	x
7.1.2	7.1.2 Natural system modifications: Fire & fire suppression: Suppression in fire frequency/intensity				
7.1.3	7.1.3 Natural system modifications: Fire & fire suppression: Trend Unknown/Unrecorded				
7.2.1	7.2.1 Natural system modifications: Dams & water management/use: Abstraction of surface water (domestic use)				

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
7.2.2	7.2.2 Natural system modifications: Dams & water management/use: Abstraction of surface water (commercial use)				
7.2.3	7.2.3 Natural system modifications: Dams & water management/use: Abstraction of surface water (agricultural use)				
7.2.4	7.2.4 Natural system modifications: Dams & water management/use: Abstraction of surface water (unknown use)				
7.2.5	7.2.5 Natural system modifications: Dams & water management/use: Abstraction of ground water (domestic use)				
7.2.6	7.2.6 Natural system modifications: Dams & water management/use: Abstraction of ground water (commercial use)				
7.2.7	7.2.7 Natural system modifications: Dams & water management/use: Abstraction of ground water (agricultural use)				
7.2.8	7.2.8 Natural system modifications: Dams & water management/use: Abstraction of ground water (unknown use)				

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
7.2.9	7.2.9 Natural system modifications: Dams & water management/use: Small dams				
7.2.10	7.2.10 Natural system modifications: Dams & water management/use: Large dams				
7.2.11	7.2.11 Natural system modifications: Dams & water management/use: Dams (size unknown)				
7.3	7.3 Natural system modifications: Other ecosystem modifications				
8.1.1	8.1.1 Invasive & other problematic species, genes & diseases: Invasive non-native/alien species/diseases: Unspecified species				
8.1.2	8.1.2 Invasive & other problematic species, genes & diseases: Invasive non-native/alien species/diseases: Named species				
8.2.1	8.2.1 Invasive & other problematic species, genes & diseases: Problematic native species/diseases: Unspecified species				
8.2.2	8.2.2 Invasive & other problematic species, genes & diseases: Problematic native species/diseases: Named species				

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
8.3	8.3 Invasive & other problematic species, genes & diseases: Introduced genetic material				
8.4.1	8.4.1 Invasive & other problematic species, genes & diseases: Problematic species/diseases of unknown origin: Unspecified species				
8.4.2	8.4.2 Invasive & other problematic species, genes & diseases: Problematic species/diseases of unknown origin: Named species				
8.5.1	8.5.1 Invasive & other problematic species, genes & diseases: Viral/prion-induced diseases: Unspecified "species" (disease)				
8.5.2	8.5.2 Invasive & other problematic species, genes & diseases: Viral/prion-induced diseases: Named "species" (disease)				
8.6	8.6 Invasive & other problematic species, genes & diseases: Diseases of unknown cause				
9.1.1	9.1.1 Pollution: Domestic & urban waste water: Sewage				
9.1.2	9.1.2 Pollution: Domestic & urban waste water: Run-off				

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
9.1.3	9.1.3 Pollution: Domestic & urban waste water: Type Unknown/Unrecorded				
9.2.1	9.2.1 Pollution: Industrial & military effluents: Oil spills				
9.2.2	9.2.2 Pollution: Industrial & military effluents: Seepage from mining				
9.2.3	9.2.3 Pollution: Industrial & military effluents: Type Unknown/Unrecorded				
9.3.1	9.3.1 Pollution: Agricultural & forestry effluents: Nutrient loads				
9.3.2	9.3.2 Pollution: Agricultural & forestry effluents: Soil erosion, sedimentation				
9.3.3	9.3.3 Pollution: Agricultural & forestry effluents: Herbicides & pesticides				
9.3.4	9.3.4 Pollution: Agricultural & forestry effluents: Type Unknown/Unrecorded				
9.4	9.4 Pollution: Garbage & solid waste				
9.5.1	9.5.1 Pollution: Air-borne pollutants: Acid rain				
9.5.2	9.5.2 Pollution: Air-borne pollutants: Smog				
9.5.3	9.5.3 Pollution: Air-borne pollutants: Ozone				
9.5.4	9.5.4 Pollution: Air-borne pollutants: Type Unknown/Unrecorded				

Classification	Full Description	Past threats (no longer occurring)	Current threats	Threats expected to emerge or continue over next 10 years	Threats that would be relevant in the long-term aspiration scenario
9.6.1	9.6.1 Pollution: Excess energy: Light pollution				
9.6.2	9.6.2 Pollution: Excess energy: Thermal pollution				
9.6.3	9.6.3 Pollution: Excess energy: Noise pollution				
9.6.4	9.6.4 Pollution: Excess energy: Type Unknown/Unrecorded				
10.1	10.1 Geological events: Volcanoes				
10.2	10.2 Geological events: Earthquakes/tsunamis				
10.3	10.3 Geological events: Avalanches/landslides				
11.1	11.1 Climate change & severe weather: Habitat shifting & alteration		x	x	x
11.2	11.2 Climate change & severe weather: Droughts			x	x
11.3	11.3 Climate change & severe weather: Temperature extremes		x	x	x
11.4	11.4 Climate change & severe weather: Storms & flooding		x	x	x
11.5	11.5 Climate change & severe weather: Other impacts				
12.1	12.1 Other threat				

References

TTWG [Turtle Taxonomy Working Group: Rhodin, A.G.J., Iverson, J.B., Bour, R., Fritz, U., Georges, A., Shaffer, H.B. and van Dijk, P.P.]. 2021. Turtles of the World: Annotated Checklist and Atlas of Taxonomy, Synonymy, Distribution, and Conservation Status (9th Ed.). Turtle Taxonomy Working Group (TTWG). In: A.G.J. Rhodin, J.B. Iverson, P.P. van Dijk, C.B. Stanford, E.V. Goode, K.A. Buhlmann and R.A. Mittermeier (eds), *Conservation Biology of Freshwater Turtles and Tortoises: A Compilation Project of the IUCN/SSC Tortoise and Freshwater Turtle Specialist Group. Chelonian Research Monographs*, Volume 8, pp. 1–472. Lunenburg, MA, USA. DOI: 10.3854/crm.8.checklist.atlas.v9.2021.

Appendix 1. Assessor Self-Review

1. **Disclose any potential conflicts of interest which could bias the assessment**.
   No conflict of interest to disclose

2. **Is there any discrepancy between this assessment and the Red List assessment for the species? If so, comment on the likely reason for this discrepancy.**
   No

3. **Review the impact that you assigned to the various threats and conservation actions. Would the trajectory of the species be very different if other choices were made? If so, review your justification for these choices. If appropriate, widen the bounds on tabs 4 and 5-8 (change the lower and upper plausible values) to reflect the uncertainty introduced by the possibility of these other choices. How, if at all, did this review question cause this assessment to change? If no changes were needed, please write "no changes".**
   No changes.