		Status Quo	Action			
Resource	**Component**	**Alternative 1**	**Alternative 2**	(example of how to read the matrix for Alt 1)	(example of how to read the matrix for Alt 2)	
	MUS:	*No Impact to Slight Negative*: the MUS list would remain as it is currently and no other changes would be made, and thus we expect the fishery would continue normal operations. However, retaining the current MUS could lead to BMUS management issues down the road associated with managing shallow water species predominantly caught in territorial waters.	*Slight Positive*: the MUS list would be changed to be more reflective of the current state of the fishery, focusing on deep-water species predominantly caught in federal waters. This will facilitate management efforts for BMUS going forward.	What are the impacts of NOT changing the MUS list on the blue-shaded resouce (i.e., target species)?	What are the impacts of changing the MUS list as described on the target species?	
	SDC:	*No Impact to Slight Negative*: things would remain as they are currently, but the current SDC may not be adequate for this data limited fishery.	*Slight Positive*: the proposed length-based SDC would have more utility for the American Samoa bottomfish fishery harvesting BMUS because the fishery is considered data-limited, meaning that usual catch-based data and management provisions could be based on catch numbers with relatively high uncertainty. There is higher confidence for available length data, which could more accurately identify the state of the fishery (i.e., overfished/overfishing).	What are the impacts on the target species from NOT changing SDC?	What are the impacts of changing SDC in the way the component report describes, on the target species?	

Table 34: Guidelines for defining the direction and magnitude of the impacts of alternatives on the VECs.

General Definitions				
VEC	**Resource Condition**	**Direction of Impact of Action**		
		Positive (+)	Negative (-)	No Impact (0)
Target and non-target species	Overfished status defined by the MSA	Alternatives expected to maintain biomass above the overfished threshold*	Alternatives expected to maintain or result in biomass below the overfished threshold*	Alternatives that do not impact stock status
ESA-listed protected species (endangered or threatened)	Populations at risk of extinction (endangered) or endangerment (threatened)	Alternatives that contain specific measures to ensure no interactions with protected species (i.e., no take)	Alternatives that result in interactions/take of listed species, including actions that reduce interactions	Alternatives that do not impact ESA listed species
MMPA protected species (not also ESA listed)	Stock health varies by species	Alternatives that maintain takes below PBR and approaching the Zero Mortality Rate Goal	Alternatives that result in interactions with/take of marine mammals that could result in takes above PBR	Alternatives that do not impact MMPA protected species
Physical environment/ habitat	Many habitats degraded from historical effort	Alternatives that improve the quality or quantity of habitat	Alternatives that degrade the quality/quantity or increase disturbance of habitat	Alternatives that do not impact habitat quality
Human communities	Varies by fishery and community (some landings stable, some decreasing, some increasing)	Alternatives that increase revenue and social well-being of fishermen and/or communities	Alternatives that decrease revenue and social well-being of fishermen and/or communities	Alternatives that do not impact revenue or social well-being of fishermen and/or communities

	Magnitude of Impact	
A range of impact qualifiers is used to indicate any existing uncertainty	Negligible	To such a small degree to be indistinguishable from no impact
	Slight (sl), as in slight positive or slight negative	To a lesser degree / minor
	Moderate positive or negative	To an average degree (i.e., more than "slight", but not "high")
	High, as in high positive or high negative	To a substantial degree (not significant unless stated)
	Significant (in the case of an EIS)	Affecting the resource condition to a great degree, see 40 CFR 1508.27.
	Likely	Some degree of uncertainty associated with the impact

*Actions that will substantially increase or decrease stock size, but do not change a stock status may have different impacts depending on the particular action and stock. Meaningful differences between alternatives may be illustrated by using another resource attribute aside from the overfished status, but this must be justified within the impact analysis.

Target species/ stocks	ACL/AMs/(h)(2):	*No Impact to Slight Negative*: things would remain as they are currently, but the current suite of provisions utilizing ACLs may not be adequate for this data limited fishery.	*Slight Positive*: the proposed length-based ACLs, etc., would be better suited for the bottomfish fishery harvesting BMUS.	What are the impacts on the target species from NOT changing the ACL framework?	What are the impacts of changing the ACL framework in the way the component report describes on the target species?	
	EFH:	*No impact*: EFH is already defined for the current MUS to the extent practicable.	*Negligible to Slight Positive*: there is negligible impact to EFH by moving the proposed MUS species to ECS, because the EFH footprint of these species overlaps with EFH for species that will remain in the MUS list. Therefore, the habitat would remain protected. For species being added as MUS, there is a slight positive impact because we would have new EFH designations for species that did not have previously existing designations.	What are the impacts on the target species of NOT changing monitoring and bycatch?	What are the impacts of changing EFH in the way the component report describes on the target species?	
	Monitoring and Bycatch:	*Slight Negative*: current monitoring is inadequate and led to a data limited BMUS stock complex. This monitoring would remain in place for the current BMUS and its deficiencies would continue to adversley impact the assessment and management of American Samoa bottomfish.	*Slight Positive*: the proposed monitoring will improve data collection specific to the bottomfish fishery	What are the impacts of NOT changing monitoring and bycatch, on the target species?	What are the impacts of changing monitoring and bycatch in the way the component report describes, on the target species?	

	Fishing Communities:	*No Impact.*	*No Impact.*	What are the impacts of NOT changing anything for fishing communities on the target species?	What are the impacts of changing anything for fishing communities in the way the component report describes, on the target species?	Note: fishing communitie s don't have any changes associated for the proposed action at this stage.
Non-target species/	MUS:	*No Impact to Slight Negative*: If the American Samoa BMUS list were to remain as is, the continuation of the management regime for these species could lead to diminished stock health given the inadequate nature of management for the current list. If the deficiencies in management lead to lowered stock health and ecological function for target species, there could be indirect impacts to non-target species due to lowered abundance of target species (e.g., target switching) or ecological function of the target species.	*No Impact to Slight Positive*: By revising the BMUS list, managment efforts for American Samoa bottomfish will be focused on species that are caught by the fishery in federal waters, including the addition of species not previously managed as MUS. This could have indirect positive impacts on non-target stocks if the improved management of the BMUS leads to improved stock health and ecological function.			
	SDC:	*No Impact to Slight Negative*: same as above. Retaining list with current species and SDC could lead to overfished/overfishing determinations in the future that indirectly impact non-target stocks.	*No Impact to Slight Positive*: same as above. Revising list to focus species' management provisions, including SDC, could lead to more accurate overfished/overfishing determinations in the future. Reduce likelihood for target swtiching etc.			

species/ stocks	ACL/AMs/(h)(2):	*No Impact to Slight Negative*: same as above. Retaining current ACL provisions could lead to depressed stock health, etc.	*No Impact to Slight Positive*: same as above. Revising ACL provisions could lead to improved stock health through improved management - less likely to be adverse impacts on non-target stocks.			
	EFH:	*No Impact*: EFH would remain unchanged for target species, so no chance for additional adverse impacts to non-target stocks.	*No Impact*: EFH footprint would remain similar, which means that protections associated with EFH (and the indirect impacts of those protectsion on non-target stocks) would remain in place over a comparable area.			
	Monitoring and Bycatch:	*Slight Negative*: current monitoring for BMUS is inadequate, and the same monitoring would provide information for non-target species. Thus, the same deficiencies plaguing the BMUS would impact non-target species data.	*Slight Positive*: the proposed monitoring will improve data collection for the bottomfish fishery but would also capture species outside of the BMUS.			
	Fishing Communities:	*No Impact.*	*No Impact.*			
	MUS:	*No Impact:* the AS BMUS list would remain as it is currently with low to negligible bycatch impacts. Further, bottomfish fishing would remain highly target specific.	*Negligible*: the AS BMUS list would be revised but fishery operations are expected to remain consistent given the administrative nature of the proposed action. If for some reason there were to be a shift in targeted species resulting from the revised BMUS list, then there may be an increase in inicidental catches of other bottomfish species, but species are not typically released in American Samoa if they are different from what was being originally targeted.			

Bycatch	SDC:	*No Impact:* there would be no potential for adverse impacts associated with bycatch from retaining BMUS SDC as they are currently.	*No Impact:* there would be no potential for adverse impacts associated with bycatch from revising BMUS SDC for the proposed species list.			
	ACL/AMs/(h)(2):	*No Impact:* there would be no potential for adverse impacts associated with bycatch from retaining the ACL/AM framework for BMUS as it exists currently. If the ACLs continue to be set based on catch data, then the ACLs may continue to be relatively lower than the fishery could theoretically support. It is possible that fishers who are aware of the low ACL in this scenario to target swtich away from MUS.	*No Impact:* there would be no potential for adverse impacts associated with bycatch from revising the ACL/AM framework for BMUS to focus on length and rate-based thresholds.			
	EFH:	*No Impact:* there would be no potential for adverse impacts associated with bycatch from retaining BMUS EFH as it exists currently.	*No Impact:* there would be no potential for adverse impacts associated with bycatch from revising BMUS EFH to account for species newly classified as MUS.			
	Monitoring and Bycatch:	*No Impact:* there would be no potential for adverse impacts associated with bycatch from retaining BMUS monitoring as it exists currently. Bycatch would continue to be negligible.	*No Impact:* there would be no potential for adverse impacts associated with bycatch from revising BMUS monitoring to better capture length information. Bycatch would continue to be negligible.			
	Fishing Communities:	*No Impact.*	*No Impact.*			

ESA listed resources	MUS:	*No Impact*: Retaining the AS BMUS as is would not change fishery operations such that they begin to impact ESA-listed resources. Bottomfishing is not known to cause impacts to protected species at this time, due in part to the high selectivity associated with handlining.	*No Impact*: Revising the AS BMUS to remove shallow water species and focus on deep water species could shift effort further offshore, but this would not necessarily result in different impacts to protected species and fishery operations would otherwise remain unchanged. Also, bottomfishing is highly target specific and not known to interact with protected species.			
	SDC:	*No Impact:* Retaining SDC as they currently exist would not cause the AS BMUS fishery to have adverse effects on protected species.	*No Impact*: establishing new SDC for newly listed bottomfish would have no impact on protected species.			
	ACL/AMs/(h)(2):	*No Impact:* Retaining the ACL/AM framework as it currently exists would not cause the AS BMUS fishery to have adverse effects on protected species.	*No Impact*: udating the ACL/AM framework used for bottomfish would have no potential to impact protected species.			
	EFH:	*No Impact:* Keeping EFH as is would not cause the AS BMUS fishery to have adverse effects on protected species.	*No Impact:* Updating EFH would have no bearing on impacts to protected species unless protected speices also share that EFH, but that would be the same under the status quo too.			
	Monitoring and Bycatch:	*No Impact:* Keeping our monitoring approach as it currently exists would not cause the AS BMUS fishery to have adverse effects on protected species.	*No Impact to slight positive:* Improved monitoring could mean improved science for the fishery to examine protected speices interactions further in the future			
	Fishing Communities:	*No Impact.*	*No Impact.*			
MMPA listed resources	MUS:	*Same as above.*	*Same as above.*			
	SDC:	*Same as above.*	*Same as above.*			
	ACL/AMs/(h)(2):	*Same as above.*	*Same as above.*			
	EFH:	*Same as above.*	*Same as above.*			

	Monitoring and Bycatch:	*Same as above.*	*Same as above.*			
	Fishing Communities:	*Same as above.*	*Same as above.*			
Physical resources (environment)	MUS:	*No Impact*: the AS BMUS fishery is not known to impact physcial resources, and fishery operations would be expected to continue normally under the status quo.	*No Impact:* Revising the species list for AS BMUS in the FEP would not have any potential to impact physical resources since the fishery is not known to adversely impact the physical environment and the administrative action to revise federally managed species is not likely to change fishing operations/targeting/etc.			
	SDC:	*No Impact*: retaining the SDC for the current AS BMUS would not have any adverse effects on the phyiscal environment.	*No Impact*: establishing SDC for newly managed species in the FEP would not have any potential to impact the physical environment.			
	ACL/AMs/(h)(2):	*No Impact*: retaining the ACL/AM framework for the current AS BMUS would not have any impact on the physical environment since the fishery is not known to impact physical resources.	*No Impact*: revising ACL/AM framework to include rate based mechanisms would not impact the physical environment.			
	EFH:	*No impact*: retaining EFH as it is current would continue offering protections to the habitat that fall within this classification but would not be as reflective of the current state of the fishery as the action alternative.	*Negligible to Slight Positive*: Because newly listed MUS would require an EFH designation, the updated BMUS list would necessitate new habitat protection for newly listed MUS species (i.e., ultimately offering protection for a greater overall number of species). However, the habitat footprint would be the same as the current footprint and the area of jurisdiction would not change.			

	Monitoring and Bycatch:	*No impact*: retaining the current monitoring protocols would not have any impact on the physical environment because fishing operations would remain the same and the fishery is not known to impact physical resources.	*No Impact*: improving length based monitoring would not have any effects on the physical environment.			
	Fishing Communities:	*No Impact.*	*No Impact.*			
EFH	MUS:	*No Impact:* Retaining the AS BMUS as they currently exist would not have the potential to impact EFH for AS BMUS.	*Negligible to Slight Positive*: Changing the BMUS would revise the EFH designations for the species reclassified from MUS to ECS and EFH designations would need to be added for those speices reclassified as MUS in the FEP. While the overall EFH footprint is not expected to change, EFH designations for specific species are subject to change to better describe species actively under federal management.			
	SDC:	*No Impact:* Retaining SDCs as they currently exist would not have the potential to impact EFH for AS BMUS.	*No Impact:* Revising SDCs would not have the potential to impact EFH for AS BMUS.			
	ACL/AMs/(h)(2):	*No Impact:* Retaining ACLs/AMs as they currently exist would not have the potential to impact EFH for AS BMUS.	*No Impact:* Revising mechanisms by which ACLs/AMs are specified would not have the potential to impact EFH for AS BMUS.			

	EFH:	*No Impact*: EFH would not be changed since the BMUS list would be retained as it current exists.	*Slight Positive*: EFH would be changed in accodance with the proposed MUS such that each of the newly listed species in the FEP would have EFH designations. While more species would have EFH, the EFH footprint is expected to remain the same, which limits positive outcomes associated with designated EFH for newly managed species.			
	Monitoring and Bycatch:	*No Impact:* Retaining monitoring as it currently exists would not have the potential to impact EFH for AS BMUS.	*No Impact:* Updating monitoring protocols as it as proposed would not have the potential to impact EFH for AS BMUS.			
	Fishing Communities:	*No Impact.*	*No Impact.*			