SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON BIENNIAL HARVEST SPECIFICATIONS FOR 2017-2018 GROUNDFISH MANAGEMENT INCLUDING FINAL OVERFISHING LIMITS AND ACCEPTABLE BIOLOGICAL CATCHES

BIENNIAL HARVEST SPECIFICATIONS FOR 2017-2018 MANAGEMENT

The Scientific and Statistical Committee (SSC) reviewed a revised table of 2017-2018 groundfish overfishing limits (OFLs) and category assignments, updated from September 2015. The SSC endorses the OFLs and accompanying category designations in Table 1 of this report. In this table, the highlighted cells refer to OFLs and category designations that were recommended at this meeting; all other values were adopted during the September 2015 meeting. The rationale for only those OFLs, category designations, or sigma values that might be considered non-standard (e.g., not documented in the most recent assessment or assessment update) are provided below, with corresponding analyses included in the various attachments in the briefing book. Additional discussion of the analyses conducted for yelloweye rockfish, arrowtooth flounder, and big skate are provided as Appendix A (October 2015 "mop up" panel report). The SSC reiterates the 2018 OFLs are conditioned on the 2017 removal assumption. In cases where there are alternative ACLs being considered that are different than those based on default harvest control rules as shown in Table 1, the SSC endorses those 2018 OFLs that correspond with the final preferred ACLs.

For yelloweye rockfish, the last full assessment was done in 2009, with an update assessment conducted in 2011. The 2011 update used a preliminary 2010 catch estimate of 13.1 mt, however the actual catch is now estimated to be 7.6 mt for that year. To incorporate these new data, as well as the actual realized catches from 2012 and 2013, the 2011 update was projected forward with actual rather than estimated catches for the 2010-2014 period (Agenda Item I.4, Attachment 3).

For arrowtooth flounder, the last full assessment was conducted in 2007. A data-moderate assessment was developed and reviewed at the June 2015 Council meeting, but was not approved. Consequently, the OFL estimates for the 2017-2018 assessment cycle are based on catch-only projections (Agenda Item I.4, Attachment 3).

For black rockfish in California, Oregon and Washington, the recommended OFL values are based on the 2015 stock assessment (Agenda Item I.3, Attachment 1). The SSC determined that the Oregon black rockfish should be considered a category 2 stock (with the default sigma of 0.72), while the California and Washington Stocks should be considered category 1 stocks.

For California scorpionfish, catch-only projections based on the 2005 assessment model and estimates of recent catches by California Department of Fish and Wildlife are provided in Agenda Item I.4, Attachment 3. The SSC recommends that for the 2017-2018 OFL estimates, California scorpionfish should be considered a category 2 stock, since the assessment was conducted over 10 years ago. The SSC noted that the increase in the OFL relative to the 2015-2016 values (289 and 256 mt for 2017-2018 OFLs, relative to 114 and 111 mt for 2015-2016

OFLs) is a consequence of using realized catches in the 2005-2014 period, rather than the projected catches in the 2005 model. Specifically, the 2005 model projected a 2015 depletion level of 48 percent if total catches were realized, but as actual catches in that period were lower than the 2005 projections, the revised projection led to an estimated 2015 depletion of 74 percent. This more optimistic (albeit, considerably uncertain given the age of the assessment) perception of stock status is the primary contributing factor to the increase in estimated OFL relative to the ten-year projections from the 2005 model.

For starry flounder, the recommended OFL values represent a "rollover" of the 2016 OFL, with an associated change to a category 3 assessment. For this stock, catch-only projections were not readily available given workload constraints and time delays associated with obtaining total mortality estimates at the appropriate spatial scale (consistent with the 2005 assessments).

For gopher rockfish, the SSC has concerns regarding the utility of catch-only projections given the age of the last assessment (also 2005). As a consequence of this concern and associated time constraints, a rollover of the 2016 OFL was recommended, with an associated change from category 1 to a category 3.

For Oregon kelp greenling, the SSC notes that based on an analysis of uncertainty from the decision table in the most recent stock assessment, a sigma greater than the default (0.44, rather than default 0.36 for category 1) is warranted. For Washington kelp greenling, a stock that has not previously had an OFL value, a DB-SRA analysis was developed using catches provided by Washington and the "low vulnerability" prior to inform relative stock status in the DB-SRA simulation (Agenda Item I.4, attachment 4). As with other DB-SRA estimates, the Washington kelp greenling DB-SRA model is a category 3 assessment.

For big skate, the SSC notes that the provided OFL was approved in 2014 based on an estimate of trawl survey biomass and natural mortality. However, in the 2015-2016 assessment cycle, this species was designated an "ecosystem component" (EC) species, and subsequently did not require an OFL. Since that time, it has been realized that this species is targeted in some fisheries, and reconsideration of the EC status is ongoing. Consequently, the SSC recommends that if this stock is removed from EC status, the OFLs from the 2014 analysis should be adopted, with a category 2 designation. The SSC notes that a presentation on a new methodology for deriving an OFL for big skate was reviewed at the 2015 "mop up" panel (see Appendix A of this report). The mop-up panel found the proposed method to be sufficiently promising that it recommends a data-moderate methodology review be convened to more fully review this and potentially other emerging data moderate methods.

For all stocks in Table 1, the SSC recommends that all sigma values be set at the default level for the corresponding category, except for Oregon kelp greenling (sigma = 0.44 based on the rationale above) and Aurora rockfish (sigma = 0.39 as specified in September 2015 Agenda Item H.5.a, Supplemental SSC Report).

IFQ CATCH PROJECTION MODEL

The SSC reviewed a model to project catch in the west coast limited entry trawl fishery for the shorebased individual fishing quota (IFQ) sector. The model was presented by Dr. Sean Matson

(National Marine Fisheries Service West Coast Region) via webinar on November 9, 2015. The model was first reviewed at the June 2015 meeting of SSC Groundfish and Economics subcommittees. The subcommittees provisionally endorsed the model and made technical comments at that time.

The SSC endorses the revised catch projection model for use in the groundfish harvest specifications for 2017-2018. The model represents the best available science for forecasting species-specific catch in the IFQ fishery. The SSC recommends that work continue to improve this model for use in future management decisions and provided technical comments to the analyst. The current model relies exclusively on recent catch histories to generate forecasts and therefore assumes that past conditions and behavior will continue. This method may not be capable of generating reliable forecasts under changing conditions, and future models should incorporate additional information.

BOOTSTRAP ANALYSIS FOR ANALYZING ROCKFISH BYCATCH IN THE AT SEA WHITING SECTOR

Mr. Patrick Mirick (Oregon Department of Fish and Wildlife) presented an analysis of bycatch of darkblotched rockfish in the at sea whiting fishery to the SSC. The analysis uses bootstrap methods to assign a probability of exceeding darkblotched rockfish allocations in the mothership and catcher-processor sectors. This analysis would be used in analyzing alternative harvest specifications in the whiting fishery. Previously, the GMT used historical bycatch rates (pounds of darkblotched rockfish per pound of whiting) to project darkblotched rockfish allocation required by the fishery. The GMT would like to improve the analysis of projected bycatch impacts on the whiting fishery by calculating the probability of exceeding alternative proposed allocations as well as allocation levels that do not exceed desired thresholds.

The SSC agrees that simulating bycatch outcomes using bootstrap methods is a promising method. The SSC recommends three general modifications to the proposed method.

1. Observations should not be separated into zero/positive darkblotched hauls in a two-stage resampling procedure. Instead, each draw should occur from a pool of all observed outcomes.
2. The mothership and catcher-processor sectors should be analyzed separately. The current model combines sectors to re-sample positive darkblotched hauls.
3. The procedure should first randomly choose a historical year, then re-sample from the chosen year. The result would be a distribution of yearly aggregate outcomes. This method incorporates the fact that there appears to be a strong year-dependence in bycatch.

Table 1. SSC-endorsed 2017 and 2018 OFLs (mt), and stock category designations for west coast groundfish stocks and stock complexes (overfished stocks in CAPS; stocks with new assessments in bold; component stocks in status quo stock complexes in italics; stocks scheduled for harvest specification decisions (i.e., those with specifications not already decided) are highlighted).

Stock	Cat.	2017 OFL	2018 OFL
OVERFISHED STOCKS			
BOCACCIO S. of 40°10' N. lat.	**1**	**2,139**	**2,013**
COWCOD S. of 40°10' N. lat.		**69.5**	**71.4**
COWCOD (Conception)	2	*57.9*	*59.4*
COWCOD (Monterey)	3	*11.6*	*12.0*
DARKBLOTCHED ROCKFISH	**1**	**671**	**693**
PACIFIC OCEAN PERCH	1	961	985
YELLOWEYE ROCKFISH	2	57	58
NON-OVERFISHED STOCKS			
Arrowtooth Flounder	2	16,571	16,498
Black Rockfish (CA)	**1**	**349**	**347**
Black Rockfish (OR)	**2**	**577**	**570**
Black Rockfish (WA)	**1**	**319**	**315**
Cabezon (CA)	1	157	156
Cabezon (OR)	1	49	49
California scorpionfish	2	289	286
Canary Rockfish	**1**	**1,793**	**1,661**
Chilipepper S. of 40°10' N. lat.	**1**	**2,727**	**2,623**
Dover Sole	1	89,702	90,282
English Sole	2	10,914	8,255
Lingcod N. of 40°10' N. lat.	1&2	3,549	3,310
Lingcod S. of 40°10' N. lat.	2	1,502	1,373
Longnose skate	1	2,556	2,526
Longspine Thornyhead (coastwide)	2	4,571	4,339
Pacific Cod	3	3,200	3,200
Petrale Sole	**1**	**3,280**	**3,152**
Sablefish (coastwide)	**1**	**8,050**	**8,329**
Shortbelly	2	6,950	6,950
Shortspine Thornyhead (coastwide)	2	3,144	3,116
Spiny dogfish	2	2,514	2,500
Splitnose S. of 40°10' N. lat.	1	1,841	1,842
Starry Flounder	3	1,847	1,847
Widow Rockfish	**1**	**14,130**	**14,511**
Yellowtail N. of 40°10' N. lat.	2	6,786	6,574
STOCK COMPLEXES			
Nearshore Rockfish North		118	119
Black and yellow	3	*0.01*	*0.01*
Blue (CA)	2	*34.1*	*34.8*
Blue (OR & WA)	3	*32.3*	*32.3*
Brown	2	*2.0*	*2.0*
Calico	3	-	-
China	**2**	***30.2***	***29.3***
Copper	2	*11.2*	*11.6*
Gopher	3	-	-

Stock	Cat.	2017 OFL	2018 OFL
Grass	3	*0.7*	*0.7*
Kelp	3	*0.01*	*0.01*
Olive	3	*0.3*	*0.3*
Quillback	3	*7.4*	*7.4*
Treefish	3	*0.2*	*0.2*
Shelf Rockfish North		2,303	2,302
Bronzespotted	3	-	-
Bocaccio	3	*284.0*	*284.0*
Chameleon	3	-	-
Chilipepper	**1**	***205.2***	***197.4***
Cowcod	3	*0.4*	*0.4*
Flag	3	*0.1*	*0.1*
Freckled	3	-	-
Greenblotched	3	*1.3*	*1.3*
Greenspotted 40°10' to 42° N. lat.	2	*9.4*	*9.3*
Greenspotted N. of 42 N. lat. (OR & WA)	3	*6.1*	*6.1*
Greenstriped	2	*1,299.6*	*1,306.4*
Halfbanded	3	-	-
Harlequin	3	-	-
Honeycomb	3	-	-
Mexican	3	-	-
Pink	3	*0.004*	*0.004*
Pinkrose	3	-	-
Puget Sound	3	-	-
Pygmy	3	-	-
Redstripe	3	*269.9*	*269.9*
Rosethorn	3	*12.9*	*12.9*
Rosy	3	*3.0*	*3.0*
Silvergray	3	*159.4*	*159.4*
Speckled	3	*0.2*	*0.2*
Squarespot	3	*0.2*	*0.2*
Starry	3	*0.004*	*0.004*
Stripetail	3	*40.4*	*40.4*
Swordspine	3	*0.0001*	*0.0001*
Tiger	3	*1.0*	*1.0*
Vermilion	3	*9.7*	*9.7*
Slope Rockfish North		1,897	1,896
Aurora	1	*17.5*	*17.5*
Bank	3	*17.2*	*17.2*
Blackgill	3	*4.7*	*4.7*
Redbanded	3	*45.3*	*45.3*
Rougheye/Blackspotted	2	*210.7*	*214.6*
Sharpchin	2	*364.0*	*358.4*
Shortraker	3	*18.7*	*18.7*
Splitnose	1	*1,026.7*	*1,027.1*
Yellowmouth	3	*192.4*	*192.4*
Nearshore Rockfish South		1,329	1,344
Shallow Nearshore Species		*NA*	*NA*
Black and yellow	*3*	*27.5*	*27.5*
China	***2***	***13.3***	***13.8***
Gopher (N of Pt. Conception)	*3*	*144.0*	*144.0*

Stock	Cat.	2017 OFL	2018 OFL
Gopher (S of Pt. Conception)	*3*	*25.6*	*25.6*
Grass	*3*	*59.6*	*59.6*
Kelp	*3*	*27.7*	*27.7*
Deeper Nearshore Species		*NA*	*NA*
Blue (assessed area)	*2*	*234.5*	*239.4*
Blue (S of 34 ^{o}27' N. lat.)	*3*	*72.9*	*72.9*
Brown	*2*	*170.0*	*174.0*
Calico	*3*	-	-
Copper	*2*	*310.9*	*316.7*
Olive	*3*	*224.6*	*224.6*
Quillback	*3*	*5.4*	*5.4*
Treefish	*3*	*13.2*	*13.2*
Shelf Rockfish South		1,917	1,918
Bronzespotted	3	*3.6*	*3.6*
Chameleon	3	-	-
Flag	3	*23.4*	*23.4*
Freckled	3	-	-
Greenblotched	3	*23.1*	*23.1*
Greenspotted	2	*78.9*	*78.5*
Greenstriped	2	*238.4*	*239.6*
Halfbanded	3	-	-
Harlequin	3	-	-
Honeycomb	3	*9.9*	*9.9*
Mexican	3	*5.1*	*5.1*
Pink	3	*2.5*	*2.5*
Pinkrose	3	-	-
Pygmy	3	-	-
Redstripe	3	*0.5*	*0.5*
Rosethorn	3	*2.1*	*2.1*
Rosy	3	*44.5*	*44.5*
Silvergray	3	*0.5*	*0.5*
Speckled	3	*39.4*	*39.4*
Squarespot	3	*11.1*	*11.1*
Starry	3	*62.6*	*62.6*
Stripetail	3	*23.6*	*23.6*
Swordspine	3	*14.2*	*14.2*
Tiger	3	*0.04*	*0.04*
Vermilion	3	*269.3*	*269.3*
Yellowtail	3	*1,064.4*	*1,064.4*
Slope Rockfish South		827	829
Aurora	1	*74.4*	*74.5*
Bank	3	*503.2*	*503.2*
Blackgill	2	*143.0*	*146.0*
Pacific ocean perch	3	-	-
Redbanded	3	*10.4*	*10.4*
Rougheye/Blackspotted	2	*4.3*	*4.4*
Sharpchin	2	*91.0*	*89.6*
Shortraker	3	*0.1*	*0.1*
Yellowmouth	3	*0.8*	*0.8*
Other Flatfish		11,165	9,690
Butter sole	3	*4.6*	*4.6*

Stock	Cat.	2017 OFL	2018 OFL
Curlfin sole	3	*8.2*	*8.2*
Flathead sole	3	*35.0*	*35.0*
Pacific sanddab	3	*4,801.0*	*4,801.0*
Rex sole	2	*5,476.0*	*4,001.0*
Rock sole	3	*66.7*	*66.7*
Sand sole	3	*773.2*	*773.2*
Other Fish		537	501
Cabezon (WA)	3	*4.5*	*4.8*
Kelp greenling (CA)	3	*118.9*	*118.9*
Kelp greenling (OR) assuming sigma = 0.44	**1**	***239.1***	***203.2***
Kelp greenling (WA)	3	*7.1*	*7.1*
Leopard shark	3	*167.1*	*167.1*
Big skate	2	*541*	*541*

PFMC
11/16/15

Appendix A: Scientific and Statistical Committee's Groundfish Subcommittee

Mop-up Stock Assessment Review Panel Meeting

Report on Arrowtooth Flounder catch-only projections, Yelloweye Rockfish yield projections, and a proposed new methodology for deriving OFLs and ACLs for Big Skate and other data moderate stocks

National Marine Fisheries Service
Western Regional Center's Sand Point Facility
Alaska Fisheries Science Center
Building 4, Traynor Room 2076, September 28 – October 1
Building 4, Observer Training Room 1055, October 2
7600 Sand Point Way NE
Seattle, WA 98115

September 28 – October 2, 2015

Monday, September 28

Reviewers Present:
Dr. John Field, NMFS Southwest Fisheries Science Center, SSC, Chair
Dr. Andy Cooper, Simon Fraser University, SSC
Dr. Martin Dorn, NMFS Alaska Fisheries Science Center, SSC
Dr. Theresa Tsou, Washington Department of Fish and Wildlife, SSC
Mr. John Budrick, California Department of Fish and Wildlife, SSC
Dr. Neil Klaer, Center of Independent Experts
Dr. Owen Hamel, NMFS Northwest Fisheries Science Center, SSC

STAT Present:
Mr. John Wallace, NMFS Northwest Fisheries Science Center
Dr. James Thorson, NMFS Northwest Fisheries Science Center

Advisors Present:
Ms. Lynn Mattes, Oregon Department of Fish and Wildlife, GMT
Mr. Gerry Richter, Pt. Conception Groundfishermen's Association, GAP
Mr. John DeVore, Pacific Fishery Management Council

Overview of Arrowtooth Flounder and Yelloweye Rockfish Projections

The SSC groundfish subcommittee received a presentation from John Wallace (NWFSC) concerning arrowtooth flounder and yelloweye rockfish stock assessment projections using realized catches to inform harvest specifications for 2017 and 2018. Since catches for these stocks have tended to be lower than their specified ACLs, updating projections with realized catches can improve the accuracy the yield projections. When catches are lower than originally assumed, stock size will be higher than in the original projections, resulting in an increase in the OFLs, ABCs, and ACLs,. The magnitude of this effect depends on several factors, including the intended harvest rate, the degree to which the catches are lower than assumed, and the productivity of the stock. Notwithstanding, it should be recognized that both of these assessments are approaching the end of their useful life for informing management decisions, and any projections should be regarded as highly uncertain.

Arrowtooth flounder yield projections

The last full assessment of arrowtooth flounder was done in 2007. A data-moderate assessment was developed for arrowtooth flounder and reviewed by the SSC groundfish subcommittee during a one-day meeting immediately prior to the June 2015 Council meeting. Unfortunately the assessment could not be approved by the SSC without opportunity for further model exploration and evaluation.

The SSC groundfish subcommittee had no technical concerns regarding the yield projections for arrowtooth flounder, but had the following recommendations concerning the document. In Table 2, it should be verified that the column indicating catch includes also includes discards. The heading for this column should be changed in the final draft to indicate that total catches are reported (i.e., including discards). Table 2 should also include additional columns that report the actual adopted OFLs and ABCs during in historical period. The subcommittee also requests that a plot showing the abundance trend from NWFSC trawl survey be added to the document. This information may be helpful to gauge the need for a new assessment.

The SSC groundfish subcommittee also discussed how to estimate expected catches for the projections in 2015 and 2016. Rather than using ad hoc methods such as consulting with knowledgeable individuals, the subcommittee recommends that Groundfish Management Team provide these estimates for the current management biennium. The GMT is the most authoritative source for expected catches during the current management biennium. Projections with expected catches should be the basis for developing OFL and ABC recommendations since these are the best estimates of the actual removals (i.e., they are risk-neutral estimates of these quantities).

Yelloweye rockfish yield projections

The last full assessment of yelloweye rockfish was done in 2009, and an update assessment was subsequently conducted in 2011. Yelloweye rockfish is an overfished stock that is currently managed under a rebuilding plan with a rebuilding SPR of 76%. Stock projections for yelloweye rockfish used actual catches when available and the existing rebuilding SPR for future catches. It is important to note that these stock projections should not be regarded as new rebuilding analysis for yelloweye rockfish, rather these represent deterministic projections of the assessment model only.

A preliminary 2010 catch estimate of 13.1 t was used in the 2011 yelloweye update, however the actual catch is now estimated to be 7.6 t for that year. To incorporate this new estimate, as well as

the actual realized catches from 2012 and 2013, in the assessment, it was necessary to rerun the model before doing yield projections. The yield projection used an estimated catch in 2014 of 16.8 t from the GMT scorecard, which will likely be revised lower. The SSC groundfish subcommittee recommends that a sensitivity run be done with an assumed 8.8 t catch in 2014, which was the lowest catch during the 2011-2014 period. The impacts on 2017 and 2018 ACL for this scenario (which are likely to be minimal) should be reported in the text rather than adding a new table.

A comparison of ACLs for the old and new projections indicated that the new projections with realized catches in 2010-2014 increased the cumulative 2017-2018 ACLs by 1.4 t, an increase of 3.7%. Table 4 should include a column for the actual rebuilding ACLs for the historical period. Table 5 showing yelloweye rockfish projections for a "maximum expected catch" is potentially confusing, and should be removed.

A member of the public noted that in-season management has routinely limited yelloweye rockfish catches to levels considerably below the ACLs associated with the rebuilding plan, and wondered whether it would be possible to incorporate underachievement of the ACL into the design of rebuilding plans. It is certainly possible to include implementation error (including a consistent positive or negative bias) into a rebuilding analysis. There would need to sufficient information to adequately model implementation error and bias, and it would be necessary to extend those assumptions throughout the duration of the rebuilding period. There may be legal issues that would need to be addressed before adopting such an approach.

A proposed new methodology for setting OFLs and ABC for big skate and other data-moderate stocks

The SSC groundfish subcommittee received a presentation from Dr. James Thorson (NWFSC) on a new assessment method for estimating OFLs and ABCs for stocks without full assessments. The method relies on a time series of assessment surveys where catch per area-swept at survey stations can be considered unbiased estimates of local fish density. Therefore the method is likely to be most useful for species that are surveyed effectively in the NWFSC bottom trawl survey, such as common flatfish and shelf rockfish species, and other skate species. Under the PFMC assessment classification scheme, the proposed assessment method would be considered a data-moderate method because it relies only on survey abundance data and recent catches, and provides estimates of an aggregated population where individual year-class abundances are not distinguished.

The method is spatially-structured production model that incorporates movement. Population dynamics follow a non-age-structured Gompertz production model with a term for fishing mortality and an observation equation that links stock abundance to survey information. Stock dynamics are spatially structured and spatially correlated. Finally, the model allows for migration according to a diffusion process.

The method can be regarded as an evolutionary development of more familiar assessment tools that are used for West Coast groundfish. For example, XDB-SRA, an SSC-endorsed data moderate method, is a Bayesian production model fit to survey data, but is not spatially structured. The survey biomass * FMSY/M * M method to estimate OFL for some stocks also uses a survey time series, but total biomass estimates are used rather than tow-by-tow information. Finally, the geostatistical approach approved by the SSC for index development is also fits a density surface to tow-by-tow survey data, but without the production model constraints on year-to-year dynamics.

The SSC groundfish subcommittee had a number of technical recommendations concerning the proposed method:

The simulation experiment to evaluate model performance may give over-optimistic results because the simulation model matches the assumptions of estimation model. It may be more appropriate to operate on a finer scale spatial grid than the estimation model.

The assumption that catchability equals one is major assumption. Some means of incorporating uncertainty in catchability, for example, by estimating catchability but incorporating a prior on catchability into the objective function, could be an improvement to the method.

A step-by-step approach to model evaluation should be adopted so that a range of models with increasing complexity can be contrasted. For example, it should be possible to compare model results for non-spatial Gompertz production model, a model with spatial structure, and model with spatial structure and migration. Area-swept estimates should be compared to geostatistical methods of analyzing survey data with and without production model dynamics.

Diagnostic plots are needed to evaluate model fit. No diagnostics were included in the presentation, which posed a challenge in trying to assess the extent to which the model was or was not fitting the data. Some consideration of a range of diagnostics and criteria that could help to assess the robustness of model estimates would be helpful.

The SSC has adopted a policy that proposed methods for stock assessment need to go through methodology review before being used for stock assessment. The purpose of this process is not to stymie scientific progress, but rather to give proposed methods careful scrutiny and to understand their strengths and weaknesses. Since data moderate methods are intended to have greater throughput than full assessments, pre-approving the methodology allows STAR panels to focus more on stock-specific issues and less on modeling questions. Ideally, data moderate methods should be robust and reasonably transparent, and the complexity of approach should be matched to the data that are available. The SSC groundfish subcommittee found the proposed method to be sufficiently promising that it recommends a data-moderate methodology review be convened to review this method and other proposed data moderate methods.